

AIR FORCE MATERIEL COMMAND

APRIL 2001

LEADING EDGE

CLOSED

**UNDER NEW MANAGEMENT
THE REALITY OF BRAC**





Headquarters
Air Force Materiel Command
Wright-Patterson Air Force
Base, Ohio

Commander
Gen. Lester Lyles

Director of Public Affairs
Col. Donna Pastor

Chief, Internal Communications
Maj. Michael Kelly

Executive Editor
Ms. Libby VanHook

Assistant Editor
Ms. Estella Holmes

Department of Defense
Thomas Jefferson Awards
First Place, Magazine Format,
1996
Second Place, 1998, 1997,
1995

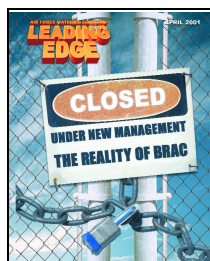
Air Force Media Awards
First Place, Magazine Format,
1998, 1997, 1996, 1995, 1994
Second Place, 1993, 1992
Third Place, 1999



This funded Air Force magazine is an authorized publication published monthly for the people of the Air Force Materiel Command. Contents of LEADING EDGE are not necessarily the official views of, or endorsed by, the U.S. Government, the Department of Defense or the Department of the Air Force. The editorial content is edited, prepared and provided by the Public Affairs Office of Headquarters Air Force Materiel Command, 4375 Chidlaw Rd., RM N152, Wright-Patterson AFB, Ohio 45433-5006. The magazine can be found on the Internet on AFMC/PA's home page: https://www.afmc-mil.wpafb.af.mil/HQ-AFMC/PA/leading_edge/index.htm. Photographs are official U.S. Air Force photos unless otherwise indicated. Distribution ratio is 8:1. For submission and writers' guidelines, contact the editor at the above address or DSN 787-7602 or (937)257-1203. Send e-mail to: Elizabeth.VanHook@wpafb.af.mil



Cover Stories



Graphic design by Tech. Sgt. Bill King, HQ AFMC/XP-AO.

4 - 21 Under new management — AFMC faces the reality of BRAC

A FMC bids a bittersweet farewell to two of the most respected members of Air Force Materiel Command's family: Kelly Air Force Base in San Antonio, Texas, and McClellan Air Force Base in Sacramento, Calif.

Mission Progress

23 X-35C nears completion of testing

23 Space-based laser hits milestone

Features

24 The new kid in town is a "robot"

25 On the "gaining" side of base closures

Departments

- 3 Mission Briefs
- 22 News Briefs
- 26 People
- 30 Awards



Mr. Phil Cason, an equipment specialist at Brooks Air Force Base, Texas, has a passion for creating works of art by animating pieces of wood. Turn to page 29 to read about how he relies on his wit and knack for whit-tling to create toys.

TEST AND EVALUATION



Boeing completes X-32A flight testing

EDWARDS AIR FORCE BASE, Calif. — Boeing completed its X-32A concept demonstrator flight testing here Feb. 3 as the aircraft made its 66th flight.

Since it first flew Sept. 18, the X-32A completed 50 flight hours with six test pilots at the controls. Boeing met all government test objectives and also provided an array of additional flight-test accomplishments.

Among the milestones of the X-32A flight-test program were:

— **X-32A first flight.** The X-32A demonstrator began its flight test Sept. 18 when the airplane flew from nearby Palmdale, Calif., to Edwards.

— **Completion of low-speed aircraft carrier tests.** Flying as many as five flights daily in November and December, the X-32A completed low-speed approach tests Dec. 2.

— **First X-32 aerial refueling.** Also in December, the X-32A demonstrated aerial-refueling capabilities. Flying at 20,000 feet and roughly 270 mph, it maneuvered below a KC-10 tanker from Travis AFB, Calif., validating the handling qualities required for this task.

— **Supersonic flight.** On Dec. 21, it broke the sound barrier at 30,000 feet and exceeded Mach 1, or 660 mph.

— **Weapons bay testing.** In January, Boeing successfully completed vibration and acoustics tests of its unique side-mounted weapons bay with and without an instrumented weapons load.

— *AFFTC Public Affairs*

F-22 program clears way for production decision

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — Air Force officials have announced that the F-22's final two requirements — first flight of Raptor 4006 and initiating radar cross section testing — were completed, clearing the way for a production decision.

Raptor 4006 flew for 72 minutes from Lockheed Martin Aeronautics Company facilities in Marietta, Ga.

The aircraft will undergo additional flight-testing at Marietta before joining the F-22 program's flight test fleet at Edwards AFB, Calif.

An F-22 was previously checked for its degree of stealth on the ground at the Marietta facilities. It was then flown and checked aerodynamically. The test flight dynamic results can now be compared to gain confidence in the manufacturing methods that produce stealth capabilities.

The F-22 System Program office, Aeronautical Systems Center here, manages the program. The Boeing Company, Seattle, Wash., and Pratt & Whitney, Hartford, Conn., have also teamed with the Air Force and Lockheed Martin to develop and produce the F-22, which is slated to be operational in late 2005.

— *ASC Public Affairs*

Team builds laser for Space-Based Laser project

LOS ANGELES AIR FORCE BASE, Calif. — The Aerospace Corporation team supporting the Space-Based Laser Integrated Flight Experiment project did more than provide systems engineering expertise recently when they built and delivered a test laser essential for the development of a beam control system.

Aerospace program office and Aerospace lab personnel started work on the optical parametric laser at their labs late last summer.

The laser is used to replicate the behavior of the high-energy laser that it will use to conduct the first-ever ballistic missile intercept from space, sometime around 2012.

Using this low-power test laser allows engineers to economically design and test systems that will correct aberrations in the

high-energy laser beam and ensure the maximum amount of energy is focused on the target.

The aerospace team overcame some of their vendor problems, including late deliveries and some low quality components, and delivered the laser on schedule to the joint venture in late January.

The team plans to use the laser in risk reduction for the next several years.

— *SMC SBL Project Office*

JASSM proves accurate in first development test flight

EGLIN AIR FORCE BASE, Fla. — Test teams successfully put Eglin's Joint Air-to-Surface Standoff Missile imaging infrared target seeker system through its paces Jan. 19, clearing another major hurdle toward it entering the nation's precision-guided munitions arsenal.

During a flight test held at White Sands Missile Range, N.M., JASSM was launched at 15,000 feet, cruising at roughly 500 mph.

The weapon separated cleanly from the aircraft, deployed its wings and tail section, and ignited its engine at the proper altitude to begin a 70-mile dash toward the target array on the desert floor.

"As it approached its target, it performed a pitch-over maneuver and dived on the target at a 70-degree impact angle. The state-of-the-art infrared imaging seeker recognized the target scene and guided the weapon to a hit," said Mr. Bridges.

JASSM is a stealthy, 2,250-pound cruise missile which carries a 1,000-pound class dual purpose warhead capable of destroying soft and distributed surface targets or deeply-buried, hardened structures.

It can fly in adverse weather, day or night, from standoff ranges well beyond enemy air defenses. Its stealth characteristics and anti-jam countermeasure components make it virtually impossible to defend against.

The next test is scheduled for early April at White Sands. If successful, a decision to enter JASSM into low-rate initial production is expected in late summer or early fall. Full rate production is expected to begin in early 2003.

— *AAC Public Affairs*

Base Closure and Realignment Commission Making difficult decisions

— Mr. E.A. “Skip” Thielen
Chief, BRAC Implementation Branch
Air Force Materiel Command

July 13, 2001, marks the end of the latest round of Congressionally mandated base closures and a bittersweet farewell to two of the most respected members of Air Force Materiel Command’s family: Kelly Air Force Base in San Antonio, Texas, and McClellan Air Force Base in Sacramento, Calif.

While a detailed account of their journey into history would fill volumes, a look back at the last six years of closure activities serves as a testament to the countless men and women of AFMC whose job it was to close these air logistics centers with dignity and honor.

Their dedication to duty and the optimistic future for community reuse of these bases attests to the determination and resiliency of the Air Force spirit.

Why close bases?

The driving force behind the need to close bases is founded in economics — what is the best way to spend defense dollars? For several decades now the size of our military establishment seems to be getting smaller; force structure, personnel and operating budgets. The one exception to this trend has been our infrastructure — our military bases.

Beginning in the 1960’s, the Air Force began reducing the number of repair depots it operates from around forty-five to five. They did it for the same reason that spawned Base Realignments and Closure, or BRAC, legislation — the Air Force could save money by consolidating.

The money saved could then be invested back into research and development and force modernization, both vital to a successful Air Force future.

BRAC legislation

There have been two public laws affecting Defense Department base closures. In 1988, Public Law 100-526 was passed forming an independent commission that recommended base closings beginning in 1990.

In 1990, Public Law 101-510 called for three more rounds of base closures in 1991, 1993 and 1995. The goal of each commission was to recommend cost-saving base closure actions that would have minimum impact on the military’s ability to operate effectively.

Early rounds of BRAC mainly focused on closing operational bases. Beginning in 1993, that trend began to change with the closing of Newark AFB, Ohio. This new trend reflected the feeling that the Air Force is getting smaller and all support bases such as depots, product centers, test centers and laboratories were not needed to support operations.

This trend continued into BRAC 1995 with the closure of San Antonio Air Logistics Center and the realignment of Kelly under Air Education and Training Command, and closure of McClellan

including the Sacramento Air Logistics Center.

For the first time, the Air Force was ordered to close two major military-industrial complexes that employed many thousands of employees and contributed millions of dollars to the local economies.

BRAC 1995 impacts on AFMC

With the BRAC Commission’s report to the President on July 1, 1995, the recommended closure of McClellan and the realignment of Kelly came as a surprise since neither base had been recommended for closure to the commission by the Defense Department.

Both bases were given the maximum time allowable for accomplishing closure: six years. This period expires on July 13, 2001.

Each base was to proceed along a slightly different path to closure since McClellan was a total closure and Kelly was to close the ALC and realign about half of the base property, including the runway, under Lackland AFB, Texas.

The bottom line was that two of the largest, most modern depots in the Defense Department had been lost forever, along with unimaginable amounts of skilled manpower and equipment that had helped give the Air Force capability to attain high levels of maintainability and sustainability.

The impact of these base closure actions on the local economies was immense. Kelly was one of the largest employers in central Texas and McClellan was located in a city that had already seen two military base closures in the last few years: Mather AFB and the Sacramento Army Depot.

Scope and magnitude of closure actions

The real challenge the Air Force faced in implementing BRAC 1995 law was the sheer size of the closure actions. AFMC was faced with closing a huge depot worth hundreds of millions of dollars and employing tens of thousands of workers — the majority of which were civilians.

With a closing depot, the repair workload just doesn’t go away. Of course, program management remained within the Air Force, but the depot repair workload had to be either transferred elsewhere within the Defense Department or privatized. And the huge amount of equipment used in the depot had to be either shipped with the workload or abandoned in place.

After much discussion and a few false starts, the depot repair workloads at both centers were opened for public and private competition bids. The C-5 depot maintenance workload at Kelly was awarded to Warner-Robins ALC, Ga.

However, partnering between private industry and public bidders proved to be the most advantageous for both the bidders and the Air Force.

Thus, the remaining competition workload for Kelly was awarded to Lockheed-Martin and Tinker AFB, Okla., with the privatized jet engine workload being performed at the former Kelly facility.

The competition workload for McClellan was awarded to

downsizing

Boeing and Hill AFB, Utah, with the privatized KC-135 workload also being performed at the Kelly facility.

The non-competed depot workloads at both bases were re-assigned either according to BRAC law, e.g. the ground-communications repair workload at McClellan was directed to Tobyhanna Army Depot, Pa., or to another Air Force depot with the existing capacity and expertise to perform the work.

Because there were more civilians than military at the bases, the relocation or separation of workers proved to be far more costly than originally estimated by the base closure model.

In fact, personnel costs are one of the most expensive and hard to predict parts of the BRAC budget. The government must either pay to relocate the employee or to separate them if no suitable positions can be found.

Also, certain cost-driving benefits come into effect at closing bases such as the ability to accrue unlimited amounts of annual leave once closure is announced. The BRAC closure model predicted that each employee would cost \$25,000 to relocate or separate. Actual experience found the average figure is closer to \$33,000.

The Air Force was able to exceed expectations in securing continued employment for the civilians at Kelly and McClellan. Of more than 18,000 employees at both bases, less than 1,600 people were involuntarily separated.

Some of those separations occurred because the employee elected to leave government service. The overwhelming majority continued working by transferring with the workload, by using priority placement programs or by leaving government service for private industry.

BRAC law also dictated that AFMC would assist all tenants located on the closing base to either relocate or remain in place as they choose. At McClellan 37 tenants elected to relocate and 16 elected to stay. At Kelly only 20 tenants elected to deactivate and 38 tenants remain in place.

Both Kelly and McClellan pursued an accelerated schedule to turn over buildings and land to the local communities. This proved to be a win-win situation for all parties because the community obtained possession of property as soon as possible, which enabled them to offer potential new tenants an outstanding facility to locate their operations.

Also, AFMC profited from an earlier turnover of real property since the base operating infrastructure could be downsized as the property was transferred to the local community.

Disposition of personal property, which is everything else on the base except buildings and real estate, was determined by applying guidelines of the Base Re-Use Implementation Manual, or BRIM.

Under BRIM, personal property could be retained and shipped elsewhere if it was a unique piece of equipment directly supporting a program transferring to another location or if there

BRAC - continued on page 6



The Base Realignment and Closure Commission began to focus on operational bases in 1993. AFMC's Newark Air Force Base, Ohio, was an early casualty, closing its doors in 1996. Its work continues under new privatization-in-place contractors. (See related story on page 21.)



BRAC's trend of downsizing support bases continued in 1995 when it was announced that McClellan Air Force Base, Calif., and San Antonio Air Logistics Center would close and Kelly Air Force Base, Texas, would realign under the Air Education and Training Command. This was the first time the Air Force was ordered to close two major military complexes and it had an enormous effect on employees and local economies.

BRAC - continued from page 5

was an existing requirement elsewhere in the Air Force. All other personal property was to be turned over to the local community to aid in redevelopment efforts or disposed.

The BRAC Commission computer model predicted that both Kelly and McClellan could be closed for \$820 million. AFMC's initial budget for accomplishing the closures was approved at \$1.2 billion.

By the end of 2000, the budget had been reduced to just over one billion dollars through refinement of requirements and application of good management practices.

Initially, the six-year window dictated by the BRAC for closing Kelly and McClellan appeared reasonable because the Air Force had never before accomplished a closure operation of this size and magnitude.

Given only general guidelines within which to develop a programming plan for closure, much of the guidance and policy necessary to achieve closure had to be developed and refined as we went along.

It became apparent that six years was more than enough time to accomplish closure.

Even though false starts in some initiatives such as workload privatization and public-to-private competitions slowed progress, both bases eventually initiated an accelerated closure schedule for workload relocation and personnel actions.

Headquarters role

The AFMC headquarters staff took on several roles in the process, serving as facilitators to the bases, providing guidance and policy to implement legislation and Secretary of the Air Force expectations. They also consolidated and presented the bases' budgets and programming plans to the Air Staff.

Virtually every functional area in the headquarters participated. However, the primary players who committed significant parts of their staff to full time support were ultimately responsible for its successful implementation — plans and programs, personnel, civil engineering, financial management and logistics and requirements.

On-time closure

So how did AFMC do in achieving closure? Will we finish on time? Within budget? Will we have maintained the command's ability to service our customers? Have we taken care of our people? Have we done everything we could to aid the community in redevelopment efforts?

The answers to these questions have to be a resounding "Absolutely!" AFMC will meet its objectives earlier than predicted and for less expense than predicted by initial budget submissions. We have achieved a better success rate than expected at caring for our employees and we have turned over hundreds

of millions of dollars worth of equipment and facilities to the local communities in San Antonio and Sacramento to help attract new business.

Re-use success stories

Even though neither Kelly nor McClellan has officially closed, both bases have accelerated their efforts to assist the local communities in their economic recovery plans.

McClellan has worked to enable several facilities to remain open including the Nuclear Reactor Complex, conveyed to the University of California; the hospital, medical and dental clinic all transferred to the Veteran's Administration; and the Base Exchange and Commissary remains operational.

AFMC has loaned navigation equipment to the county of Sacramento to enable the runway to remain open for future development.

In all, about 25 companies employing almost 2,700 people have relocated to McClellan, with the possibility of many more jobs relocating there in the foreseeable future.

The redevelopment story at Kelly is also encouraging — almost 30 companies and 5,500 new jobs. The two major new companies are Boeing and Lockheed-Martin.

Boeing is performing their part of the Boeing-Hill competition award, and Lockheed-Martin is performing their part of the Lockheed-Martin and Tinker competition award.

Additionally, Kelly has entered into partnership with the city of San Antonio to make joint use of Kelly's runway.

Future BRAC

Political watchers in Washington generally agree that the new administration will ask for another round of base closings at some point in the future.

A much-publicized tax cut and the need for continued force structure modernization in the military appear to be the driving forces.

The Air Force has been in the forefront to recognize that the future of the military lies in force modernization and research and development of new programs. With this knowledge, many analysts believe that another round of base closures could come as early as 2003.

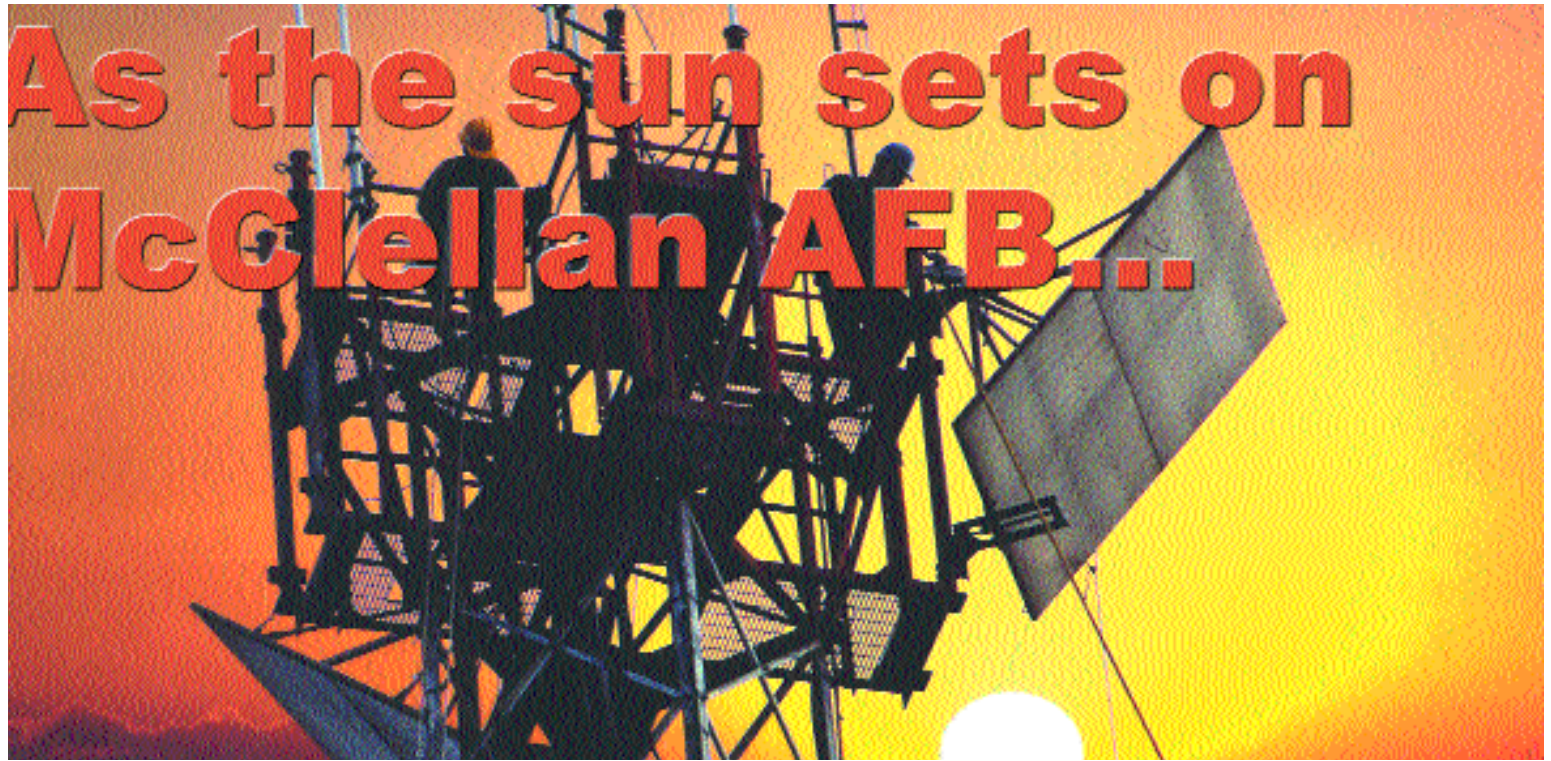
Whatever the future holds for AFMC, the spirit and patriotism of the men and women of Kelly and McClellan will not soon be forgotten.

Hardly any one of the people at those bases, who worked so hard to achieve closure, was hired to close a base. Each had to turn away from their jobs as managers and professionals to accomplish a task that was certain to bring upheaval to their lives, their families and fellow co-workers.

And this they did — with professionalism, pride, dedication and a positive attitude that supports their commitment to AFMC and their country.



Mr. Sam Rizzotte, team lead for the Kelly Air Force Base, Texas, realignment and Mr. E.A. "Skip" Thielen, team lead for the McClellan Air Force Base, Calif., closure discuss the McClellan plan for reuse.



"In the nearly six years since McClellan Air Force Base, Calif., was identified for closure, members of Team McClellan have achieved more than was ever thought possible," said Mr. Jim Barone, Sacramento Air Logistics Center director. "They have closed the depot maintenance, program and supply management missions, and laid the foundation for a revitalized McClellan. More than 25 private businesses now call McClellan home and Sacramento County planners estimate that as many as 34,000 jobs could one day reside at the new McClellan Park. These achievements reflect the professionalism and honor with which the members of Team McClellan have conducted themselves. The following articles provide just a glimpse into this remarkable effort."

ALC continues to shape legacy

— **Mr. Jim Barone**
Director, Sacramento Air
Logistics Center

We have inherited a proud legacy at McClellan Air Force Base — a legacy filled with accomplishment. Our task now is to preserve that legacy in the challenging days ahead.

Over the decades, the many missions we supported kept us strong and free. From the P-38s, B-17s and B-25s of World War II, to the stalwart F-111, F-117 Stealth Fighter, KC-135 tankers and the A-10 Thunderbolt of today, the men and women of this proud installation have sustained America's air arsenal during times of peace and war.

But we also became the eyes, ears and nervous system of our nation's military

might as we supported the ever-vigilant sensors, radar systems and global communication networks keeping our country alert, informed and ready.

While workloads have changed dramatically over the decades, the one constant has been the work force, which has consistently performed its mission at McClellan.

Over the past three years, McClellan's workers have successfully transferred critical weapon systems and inventories to new bases while maintaining uninterrupted ability to support combat forces around the world.

Now these workers are confronting their final challenge. They must finish the job of turning in equipment, turning over facilities and laying the foundation for a revitalized McClellan.

We must take care of the people who

still come to work here each day. These are the everyday heroes — for they come here knowing that all too soon they must leave forever.

These are the people and families for whom we must remain vigilant to ensure they receive the support they have so clearly earned — whether they choose to retire or move to new bases or new careers.

Many have departed. Those who remain face a final mission no less daunting than those accomplished in the past.

Together, we must preserve for posterity the noble legacy, heritage and contributions of McClellan Air Force Base.

This is our challenge and our goal. And I am proud to be a part of the team that is now poised to complete the mission of McClellan with professionalism and honor.

McClellan ships last KC-135 workload

In August 2000, the Aircraft Management Directorate, Sacramento Air Logistics Center, shipped the last of McClellan's KC-135 workload to PEMCO Aeroplex Corporation in Birmingham, Ala. This action brings an end to the on-going KC-135 Stratotanker restoration project, which began at McClellan Air Force Base in the early 1990's.

The McClellan restoration process on these airplanes took one to two years and more than 30,000 man-hours to accomplish, and included a virtual disassembly and reassembly of all systems, said Mr. Gerry Hampton, aircraft management director.

"We had the ability to rebuild or repair any structural component required to ensure a reliable and safe aircraft," said Mr.



Michael Rilje, aircraft scheduling branch chief.

"Our mission was to produce a structurally sound aircraft; accomplish aircraft upgrades such as replacing aircraft wiring, avionics equipment and interior components, along with a myriad of assorted systems," he said. "Our job was to increase the safety and reliability of every aircraft that we overhauled."

"Base closure has presented the aircraft management directorate with some unique challenges," said Mr. Hampton. "Directorate personnel have shown a strong amount of professionalism with their effort to ensure that the last planes to leave McClellan were as well prepared as the first."

— Mr. Jim Reeves, SM-ALC Public Affairs

Nuclear radiation center turned over to University of California

The ceremonial transfer of the McClellan Nuclear Radiation Center from the Air Force to the University of California at Davis took place June 16, 2000, with the passing of the key from Mr. Jim Barone, director of the Sacramento Air Logistics Center, to Mr. Larry Vanderhoef, chancellor of UC Davis. Davis plans to use the Nuclear Radiation Center for research, education and commercial purposes.

"As McClellan Air Force Base is drawing toward closure and closing the books on programs, it is rewarding to be involved in and see a new chapter opening for UC Davis and the McClellan nuclear reactor," said Mr. Barone.

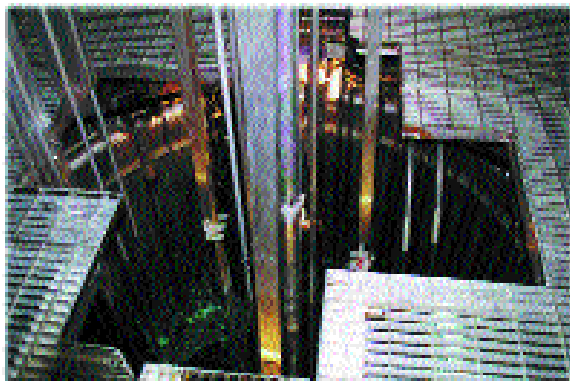
The radiation center was built by the Air Force in 1990 to detect early corrosion and hidden defects in airplanes. At its heart is a two-megawatt reactor designed to produce beams of neutrons. It is the newest such reactor in the United States. Its value in 1990 was \$16 million; today it is estimated at \$40 million.

In 1993, researchers started to find nonmilitary uses for the reactor. Soon semiconductor manufacturers were using it to improve the conductivity of materials. Cancer specialists at the UC Davis Medical Center began to develop an experimental treatment for brain tumors.

For now, UC Davis holds a 50-year lease on the reactor and the surrounding two acres in what has become the private McClellan Business Park. Eventually, the lease will convert to a deed of ownership.

The reactor will remain at its present location, 25 miles from the main UC Davis campus and 10 miles from UC Davis Medical Center in Sacramento. Safety measures will continue to be overseen by the U.S. Nuclear Regulatory Commission, as required for all nuclear reactors.

—Information provided from UC Davis news service



Pictured is the reactor chamber of the two-megawatt facility designed to produce beams of neutrons used in commercial, education and research projects.

Automated surge system shut down

Turned off but not laid to rest — that was the feeling throughout the comptroller's conference room Oct. 11, 2000, as Ms. Debbie Adair, chief depot maintenance activity group home office at McClellan, presented Mr. Jack DeVriend, management analyst, Hill AFB, Utah, with the last remnants of the automated surge management system.

Even though the ceremony marked the shutting down of the system at McClellan, Ms. Adair and Mr. DeVriend hope to implement the system at Hill. Developed in 1989 at McClellan, the system was designed to track production of critically needed war material. During Desert Shield and Desert Storm, it tracked more than 34,000 surged components.

After the Persian Gulf conflict, the system was selected for update under the AFMC and Control System modernization program, serving as the definitive model for development of an advanced surge system.

In 1996-1997 the system supported NATO Operation Joint Endeavor activities in Bosnia. In 1999 it supported the Kosovo defense campaign, during which more than 3,000 surged assets were tracked, managed and reported using the automated system.

— Ms. Sandra Kosmatin, Spacemaker editor

Workload completion marks end of operations

Sept. 6 marked the end of the operation mission at McClellan AFB, Calif., with the official completion of the production workload on the TPS-75.

The AN/TPS-75 is a highly mobile three-dimensional radar designed for rapid deployment and operation in a myriad of environments, according to Mr. John Atilano, section chief of the phased array radar system.

The TPS-75 incorporates information friend or foe and communication platforms, state-of-the-art technology and extensive electronic counter measures, along with features to minimize detection and the effects of environmental jamming and clutter, enhancing survivability.

It can be operated autonomously or in garrison as an integral part of the 485L battle management system.

"McClellan began the conversion from the TPS-43 to the TPS-75 in 1985," said Mr. Atilano. "We began overhauling the

TPS-75 in 1995 and since then we have completely overhauled 11 systems."

A team of four people work on the



Mr. Wilbur Lawrence adjusts the radar scope in the mobile TPS-75 unit on Sept. 6, 2000.

TPS-75 system while the rest of the shop works on its components.

"Once the radar comes in for overhaul it takes approximately eighteen months to complete the maintenance program," said Mr. Adrian "Dino" Gudino, electronic

mechanics supervisor. "The TPS-75 can zoom in on an object as far out as 240 miles and can identify the object, friend or foe."

The TPS-75 is the latest of a family of tactical radars manufactured by Westinghouse. Since 1968, its predecessors the AN/TPS-48, AN/TPS-43 and AN/TPS-43E were all maintained and supported by McClellan.

At the final stages, the shop had 12 members, while at the height of maintenance its shop had more than 40 members.

The TPS-43E was the first system to implement the worldwide mobile depot maintenance team concept, which was quickly adopted by most other program offices and became a vital part of support provided by McClellan.

Maintenance of the radar is slated to transfer to Tobyhanna Army Depot, Pa.

— Ms. Robin Jackson, SM-ALC Public Affairs

Team provides 53 years of service without glitches

The Space and C3I Systems Directorate Paint Shop personnel said good-bye to vehicle booth No. 2250 July 10, 2000, following 53 years of service without any glitches or environmental problems.

The huge vehicle paint booth, measuring approximately 140 feet in length and 18 feet tall, has operated as a dry filtration system for the past five years. Standing by either end with the doors open, it looks like a long wind tunnel. The inside reflects aging from years of reliable use, made evident by the walls covered with multiple colors of paint from years of overspray.

Before the booth's modification in 1995, it operated as a waterfall, downdraft and vehicle spray booth since its installation at McClellan in 1947.

Five years ago, McClellan's production personnel came up with the idea to convert the booth to a dry filtration system — a waterless emission particles removal process, according to Mr. Oscar Estela, unit environmental coordinator. Over the years, the booth has gone through six permit modifications or changes, said Mr. Estela.

"Many vans and shelters were sprayed through the 'old reliable'," said Mr. Estela. "Prior to the mod, the fall-back on this booth was that it would take approximately five down days for maintenance and water sludge removal, not to include the headaches with bulging drums containing the sludge."

According to Mr. Robert Russell, van and paint unit chief, the booth was originally used to paint vehicles and heavy equip-



Six of the remaining 12 employees from the Space and C3I Systems Directorate stand in the vehicle paint booth July 10. From left: Mr. Robert Russell, Mr. Robert Luna, Mr. Leonard Coote, Mr. Ron Wabinga, Mr. Robert Anderson and Ms. Michelle Gillespie.

ment. "It was primarily used by the motor pool," he said. "Then sometime during the early 1960's, the aircraft division took ownership of the booth and used it to paint a variety of items including everything from small parts to large vans, vehicles and 47-foot trailers."

In the early 1980's, communications and electronics division took possession of the booth from the aircraft division. It was later re-organized and became space and C3I systems directorate. The communications and electronics division has operated the booth ever since.

— Ms. Sandra Kosmatin, Spacemaker editor

Shipment team really packs punch

Imagine going to Mail Boxes Etc. and asking them to package and mail an entire aircraft.

Take that request to the folks of the Base Realignment and Closure, or BRAC, office's packaging and transportation shop at McClellan Air Force Base, Calif., and they'd simply ask, "When do you need it shipped and where to?"

The 19-member team is responsible for packing and crating equipment and supplies, from preparing paperwork to building-shipping containers.

The team built the entire operation from the ground up in just two years.

"When McClellan was hit by the BRAC commission, officials saw the need for a team to quickly process items for shipment," said Mr. Larry Holt, 77th Air Base Wing Logistics Group Supply Closure packaging specialist.

Deadlines were met and items were shipped without damage. Since conception, the team was able to provide work to folks who would have had to leave.

They were actually able to 'save' people from the reduction in force, according to Mr. Larry Ortiz, packaging specialist.

The crew is responsible for packing and shipping items such as shop equipment and computers but every now and then they get an out-of-the-ordinary request.

In one instance, they packed and crated an entire A-10. The aircraft was disassembled, packaged and crated before being sent to Hill AFB, Utah.

Because the team shops around to ensure items are shipped at the lowest possible price, they were able to save thousands of dollars when the aircraft was moved.

But not all shipments are as large and costly. "We've had packages so small that we had to put them into a larger box just so the label would fit," said Mr. Mike Miller, packaging design engineer.

So, if it's a letter you need to mail, stick with your local post office, but if you have something like a military radar system, turn to the experts of the BRAC packaging and transportation shop.

— Ms. Jennifer Vargas, SM-ALC Public Affairs

March 9, 2000

Comptroller directorate wins awards

The McClellan Air Force Base, Calif., Comptroller Directorate won six Air Force Materiel Command awards and three Air Force level special acts and services awards in March 2000. The awards are as follows:

1999 AFMC Financial Management and Comptroller Organization of the Year award

The comptroller directorate was responsible for providing outstanding mission support throughout 1999 despite extreme disruptions caused by base closure actions, drastic manpower reductions, aggressive mission divestiture schedules and Kosovo depot surge operations.

Praised by headquarters AFMC and gaining centers, the comptroller directorate ensured future financial integrity of more than \$4.5 billion in Air Force funds by crafting a mission divestiture plan with detailed termination and transfer of 240 critical mission tasks.

1999 AFMC Special Acts and Services awards

This was the third year a division within the comptroller directorate took home this award.

For the past two years the logistics systems management division won the AFMC and Air Force Special Acts and Services award. The logistics systems management division shared recognition with the requirements and budget integration division.

The Special Acts and Services award was given to three different teams within the directorate. These teams included the comptroller materiel team, the contract closure team and the financial applications integrity team.

In addition to the AFMC awards, these three teams went on to win the fiscal year 1999 Air Force level Financial Management and Comptroller awards.

The comptroller materiel team was responsible for developing and implementing the Sacramento and Ogden transfer procedures handbook, which was critical to achieving the most efficient, cost effective depot maintenance activity group means of transitioning parts, assets and computer data to Hill AFB, Utah. It allowed McClellan to recover more than \$22.3 million in material costs for the transferred competition workload.

The contract closure team developed a systemic process to transfer accounting records between the defense accounting and finance system-operating locations.

The team also developed a complex computer database that identified the universe of open accounting records to be transferred. The database encompassed 15,626 records and totaled \$2.5 billion.

The financial applications integrity team was responsible for developing and deploying a comprehensive process to verify the accuracy and reliability of selected financial application data.

1999 AFMC Financial Services Officer of the Year award

Capt. Darral Brown, financial services officer in the financial services division, was recognized for overcoming all obstacles in winning total agreement with Hill in accepting proposals for how to handle the transfer of a monumental number of financial records.

In addition, Capt. Brown continually provided support to civilian and military members for pay and travel transactions.

Capt. Brown also streamlined the civilian BRAC commission permanent change of station process, eliminated over-payments and freed up more than \$100,000 in war fighting dollars.

— Ms. Sandra Kosmatin, Spacemaker editor



Civilian receives award for valor

Mr. Kenneth L. Davis, electrical flight chief, 77th Civil Engineer Division, received an award for valor from Gen. Les Lyles, AFMC commander, on May 31, 2000, in recognition of his outstanding bravery. Mr. Davis saved a man's life Oct. 25, 1999, by responding to an electrical explosion in McClellan's commissary.

Mr. Davis was approached by Mr. John Callahan, a Sacramento Municipal Utility District electrician, to assist him with a problem in the mechanical room on the west side of the commissary.

Observing the temporary wiring installed by a weekend technician, Mr. Callahan began evaluating what corrective action was required to return the system to normal. Mr. Davis, approximately 5 feet from Mr. Callahan, was looking at a piece of equipment when he heard an explosion and saw a flash of light.

"It was all reaction," he said. "There was a fireball. When I opened my eyes I couldn't see a thing, so I shut them again. I could hear him yelling, 'I'm on fire'. So I dropped to my knees and when I could see again, I made my way over to him."

From experience Mr. Davis realized that the panel Mr. Callahan was working in had "flashed," resulting in a fireball emanating from the cabinet.

Mr. Davis immediately rushed to his side and began to put out flames engulfing Mr. Callahan's shirt. The room was rapidly filling with dense smoke; Mr. Davis put Mr. Callahan's arm over his shoulder and kicked open the doors while dragging him to safety. Mr. Davis knew immediate medical attention was essential in mitigating the injuries Mr. Callahan sustained, so he directed several commissary personnel in the area to call 911 and bring him water, ice and clean rags.

Mr. Davis' actions, based on training, common sense and his desire to help a fallen comrade culminated in a successful rescue.

— Ms. Robin Jackson, SM-ALC Public Affairs

Final aircraft departs ALC

McClellan
AFB

passed another milestone Aug. 18, 2000, on the road to closure.

Roaring engines and a tip of the wings marked the departure of the last Air Force aircraft from the base, a

KC-135 Stratotanker. This marked not only the end of the KC-135 workload but also the end of depot maintenance at McClellan.

This jet, with more than 30,000 hours of labor invested in it, left for the hangars of Pemco Aeroplex, Inc., in Birmingham, Ala., where it is undergoing the remaining maintenance work necessary to put it back in service.

For the mechanics and members of the aircraft management team, working on the last aircraft on base presented unique challenges.

"The whole aircraft team really pulled together to get this plane out of here," said Ms. Joyce Washington, a materials analyst with the aircraft management division. "People really went above and beyond on this project, coming in on their days off and working a lot of tough hours. They made it happen."

As the aircraft management division downsized, fewer people and fewer resources were available to complete the project. But doing more with less has become a way of life here. Working at one point with more than 700 personnel, aircraft management was down to less than 20 by August 18.

"The departure of this plane was bittersweet," said Mr. Gerry Hampton, director of the aircraft management division. "It was sad to see the end of an era, but I'm very proud of the people who made this effort work."

— 1st Lt. Robert Firman, SM-ALC Public Affairs



The last Air Force aircraft, a KC-135 Stratotanker, departed McClellan Air Force Base, Calif., Aug. 18, bound for Birmingham, Ala.



Newspaper named best in Air Force

After going head to head with numerous competitors throughout the Air Force, the *Spacemaker* newspaper proved itself to be "tops" for 1999 when it was named the best large funded newspaper in the Air Force.

The award continued the long-held tradition of honors bestowed on the *Spacemaker*.

The first issue of the *Spacemaker*, formerly named the Sacramento Air Depot Beacon, was published in 1941. The weekly publication went through several name changes until it became permanently known as the *Spacemaker* in 1960.

— Ms. Jennifer Vargas, SM-ALC Public Affairs

March 3, 2000

ABACUS turned off

In a step toward the impending closure of McClellan, the Automated Budget Analysis Centralized User Software system, or ABACUS, was shut down in a funeral-like ceremony March 3.

The ABACUS program has been used by the air logistics centers within AFMC since 1993 to input annual budget information in a standardized format for submission to the command.

Synergy, Inc. was hired to develop, install and maintain the program, with McClellan computer specialists, like Ms. Janice Theep, industrial fund management branch, maintaining upgrades and the general health of the system.

For the last five years, the ABACUS computer has sported a sign bearing the words "Do Not Turn Off." The funeral began with the removal of that sign and the shutdown procedure was initiated.

A peculiar twist

In a peculiar twist to the ceremony, and perhaps a testament to the tenacity of McClellan and its people, the computer refused to shut down. The procedure was repeated and the "shutdown" screen appeared on cue; but still offered the user the opportunity to "restart."

Once shutdown was complete, Mr. Mike Anderson, deputy comptroller and Mr. Mike Grubbs of the comptroller directorate unplugged the hardware and the entire system was enshrouded in a black "burial" cloth.

Rest in Peace

The ceremony was followed by a reception, complete with a black "RIP ABACUS" cake and Grateful Dead® napkins.

Mr. Anderson remarked on the celebratory atmosphere surrounding the closure milestone, "This is another example of the grace and positive attitude of Team McClellan as it progresses toward a closure we may not want, but are determined to effect professionally and honorably."

— Ms. Alica Doyle, SM-ALC Public Affairs

LIP team transitions workload to Tobyhanna

The ground communication electronic transition team, plant management division, or LIP, completed a three-year-long depot maintenance capability transition to Tobyhanna Army Depot, Pa., Oct. 31, 2000.

When the BRAC commission decided to close McClellan, they stipulated relocation of this workload to Tobyhanna, which translated to 825 personnel-equivalent positions.

The equipment for this workload was installed by the team at McClellan. They successfully bid to provide workload support and equipment transfer, including disassembly, packaging, shipping, off-loading, reassembly and installation. LIP established a team of craftsmen to prepare the equipment for relocation and travel

to Tobyhanna to perform the operations, including electricians, pipe fitters, welders, mechanics, carpenters, painters, plumbers and vehicle operators. The transition involved a total of 189 truckloads of equipment, containing nearly 20,000 items.

Supervised by Mr. Perry Sholer, the following were all part of the transition team: Mr. Ray Antonelli; Mr. Mark Benson; Mr. Brian Carlson; Mr. Sakuko "Saki" Cavin; Mr. Larry Colby; Mr. Tom Cotton; Mr. Harold Emry; Mr. Rudy Flores; Mr. Robert Gates; Mr. Ralph Haak; Ms. Donna Hatch; Mr. Johnny Henman; Mr. Paul Hill; Mr. Bill Holtzclaw; Mr. Ken Keith; Mr. Roger LeLand; Mr. Jack Leonard; Mr. Don Lewis; Mr. Paul Marino; Mr. Clifford Martling; Mr. John Minker; Mr. Don Morris; Mr. Alejandro "Alex" Paneda; Mr. Mike Rein; Mr. Greg Richards; Mr. Dale Schmid; Mr. Harry Wharff and Mr. Tom Wong.

— Ms. Sandra Kosmatin, Spacemaker editor



Mr. Cliff Martling secures a tube and mounting plate in the TPS-75 vault during installation at Tobyhanna Army Depot, Pa.

August 31, 2000

Last communication program transfers

The last of McClellan's electronic communications programs, telecommunications, was officially transferred to the Ogden Air Logistics Center, Hill AFB, Utah, Aug. 31, 2000. Responsibility for all inventory and supply management for the remaining equipment and items managed at McClellan was electronically transferred Sept. 1, 2000.

"This program represents the actual completion of the electronic communications aspects of our mission, just like the KC-135 that flew away represented the end of our aircraft maintenance work," said Mr. Jim Barone, center director.

Since the early 1980's, telecommunications programs have represented an important percentage of the workload here and once employed 44 workers. Three integrated product teams have managed these modern era worldwide programs.

"Any time the president, vice president, secretary of defense, secretary of state, or other important government officials traveled, our equipment went with them," said Mr. Ken Stanfill, director of telecommunications management division, space and C3I systems directorate. "We have supported the highest level of leaders in the free world and have seen our equipment play a major role in Desert Storm and all other world conflicts since then."

— Mr. Smokey Bassett, SM-ALC Public Affairs



Mr. George Wayrynen, former public affairs specialist, shakes hands with his long-time friend, Mr. Mike Herte, during his retirement luncheon.

Taking a risk to find success after closure

He worked as a hospital orderly while going to college. Then he opted for something more challenging and joined the Air Force where he worked in electronic countermeasures.

Following his four-year stint, he joined forces with the civilian sector at McClellan AFB, Calif., where he spent 19 years of his life before retiring in March 2000.

Like many people, Mr. George Wayrynen was forced to look retirement square in the face with base closure hot on his trail. "I was hoping to get a job after retirement and at my age, I was worried that no one would hire me," said the 55-year-old.

Mr. Wayrynen took full advantage of the base's resources to help him in his job search. While surfing the Internet, he saw a job that interested him but he felt was out of his league. Literally at the last minute he decided to give it a try. "It was the last day to apply for the job and I told myself 'this is what you've got to do if you want a job'," said Mr. Wayrynen.

Within a matter of days, he was contacted by the University of California Davis where he had his first interview in nearly two decades. To his surprise, the soon-to-be retiree was offered the position of engineering aid. The pay was less than his current salary, but his retirement pay coupled with his new salary means even more money per month.

Not only was he earning more money, more importantly, he is doing something he enjoys. As an engineering aid he is a self-proclaimed "jack of all trades." He's done everything from fixing the office answering machine to modifying and inventing tools for scientists at the university.

"I love what I do, and I get paid to do it," Mr. Wayrynen said. "I just hope everybody else has the same luck I did."

— Ms. Jennifer Vargas, SM-ALC Public Affairs

More than 400 employees say "goodbye" to McClellan

More than 100 civilian employees at a time stood in line Sept. 28, 2000, to be processed for retirement from McClellan Air Force Base.

Civilian personnel set up a World War II United Service Organization theme with donuts and coffee to welcome the newest group of retirees.

There were about 600 civilians left on base after the 499 employees retired Sept. 28. In 1995 when the Base Realignment and Closure Commission announced the closure of McClellan there were more than 10,200 civilian employees.

In addition to the retirements, approximately 175 workers departed the base Sept. 29 as part of the reduction in force process. In the local area more than 1,130 former base employees were hired through training and employment assistant programs.

— Ms. Robin Jackson, SM-ALC Public Affairs



Ms. Sally Tuggle, retired civilian personnel receptionist at McClellan AFB, Calif., assists retiring employees and greets them with refreshments during the civilian retirement process Sept. 28, 2000.



Ms. Tina Barber, from Hill Air Force Base Civilian Personnel office, assists in the final signing of Ms. Mary Kornegay's retirement papers.



In 1995, following the Base Realignment and Closure announcement, Kelly AFB, Texas, began the realignment and closure journey. "After providing extraordinary mission support for more than 80 years, the time had come to make significant changes," said Maj. Gen. Paul Bielowicz, former commander and now AFMC director of Logistics. "The men and women of Kelly never wavered in their devotion and determination to ensure Kelly continues as a world-class operation. Kelly's realignment and closure has been one of the most complex transformations in the history of BRAC. It has also been a tremendous success story for the San Antonio community and the Air Force. The people of Kelly have rendered long and outstanding service to this nation and have built a tradition that will endure through time."

The Kelly story, as told in this magazine, highlights only a few of the many key accomplishments associated with the BRAC implementation. "The transformation of Kelly AFB to KellyUSA will be a world-class center for international business, employing many former Kelly employees and bringing continued growth to the San Antonio community," said Brig. Gen. Robert Murdock, commander. "I salute Team Kelly for a job well done!"

Through the years: Kelly AFB has a long legacy

Kelly Air Force Base, Texas, has a proud history and a proud legacy having served the nation for more than 80 years in both war and peace.

Today, "Kelly Field" is the oldest, continuously active air field in the United States Air Force.

Humble beginnings

From humble beginnings as Maj. Benjamin Foulois' site for "a new flying field" in November 1916, Kelly has evolved from a grass landing strip into a world class commercial aerospace maintenance facility with Boeing and Lockheed

Martin as the largest tenants.

America entered the first World War the day after Kelly Field opened and the base's operations expanded to meet the needs of the Army's fledgling air arm. From 1917 to 1918, more than 250,000 men assembled at Kelly to be trained as mechanics, pilots and flying instructors.

Following World War I, Kelly was left open to consolidate operations from other locations. During the 1920s, the Advanced Flying School moved here and the base became a major supply and repair depot.

In 1939, Congress authorized \$300 million to strengthen the Army Air Corps and hundreds of new planes, officers and enlisted men made their way here. Almost overnight, the maintenance population exploded from approximately 1,100 to more than 20,000 and more than 40 percent of the work force were women. These "Kelly Katies" were the San Antonio version of "Rosie the Riveter."

Kelly Field became Kelly Air Force Base in January 1948, a few months after the Air Force became a separate service. Kelly played a vital role in the largest air



Top: The Jen-4 "Jenny" was the first aircraft to land at Kelly Field. It was the U.S. military's primary training aircraft throughout the next decade. Bottom: Called out of retirement in the early 1950s, these B-29 Superfortresses were spruced up and readied for action in the Korean Conflict. Kelly's maintenance line worked around the clock to put these famed warbirds back into service.

cargo operation of all time — the Berlin Airlift. Kelly was the only depot in the country repairing and overhauling the engines used by Air Force cargo airplanes carrying food and supplies to Berliners.

Working around-the-clock

The outbreak of the Korean War in June 1950 placed heavy demands on Kelly. The maintenance line went into round-the-clock production to recondition B-29s for overseas service.

By 1951 the giant Convair B-36, rapidly taking the place of the B-29, began arriving at Kelly for maintenance and repair.

In 1956, Kelly became the specialized repair depot for the Boeing B-47 Stratojet, the Air Force's first all-jet strategic bomber. In 1960, Kelly began repair of the B-58 Hustler, America's first supersonic bomber.

A few years later, the B-52 became the major depot-level maintenance workload.

Kelly employees were deeply involved

in supplying parts and expertise for the Vietnam conflict. Kelly managed weapon systems used in Southeast Asia which included F-102, A-37, O-2, B-52 and F-5 aircraft.

Another Vietnam-era role Kelly played was "Operation Homecoming" in 1973. Thirty-two American former prisoners of war were greeted by Kelly workers as they returned home from years of captivity in Vietnam.

Ever changing workloads

In 1970, Kelly became the maintenance and repair depot for the C-5A Galaxy, the world's largest aircraft. The F100 engine became a major engine workload as F-16 and F-15 fighters entered the Air Force inventory.

During Operation Just Cause, a 1989 effort to end the rule of Panama dictator Manuel Noriega, Kelly served as a reception point for more than 250 incoming wounded American soldiers and as a transit point into and out of Panama for more

Maj. Benjamin Foulois selected the site for "a new flying field" in November 1916. Today that flying field is known as Kelly Air Force Base, Texas.

than 8,200 troops.

In August 1990, the Kelly work force began around-the-clock support for Operation Desert Shield and Desert Storm, moving more than 10,000 tons of materiel, 17 million pounds of munitions and more than 4,700 passengers in support of these efforts.

The end of an era

In the summer of 1995, a new chapter in Kelly's long history unfolded. The Defense Base Closure and Realignment Commission recommended to realign Kelly Air Force Base, including the air logistics center, disestablish the Defense Distribution Depot and consolidate the workloads to other Defense Department depots or to private sector commercial activities. Thus, began Kelly's transformation from 1995 until 2001.

— Information supplied by SA-ALC Public Affairs

Reinventing Kelly's engine depot maintenance workload

The \$750 million engine overhaul and repair work performed at Kelly Air Force Base, Texas, was identified for public-private competition by the Base Realignment and Closure Commission in 1995.

The source selection process involved a determined core of Team Kelly members, often working around-the-clock. The Oklahoma City Air Logistics Center, Tinker AFB, Okla., and Lockheed Martin were awarded the contract in February 1999.

Their proposal included performing part of the work on the F100 engine at Tinker by the Air Force, and work on the TF39 engine in KellyUSA facilities by Lockheed Martin and its partners, including: Standard Aero for the T56 engine; Woodward on mechanical accessories; Chromalloy on metal plating operations and EG&G for logistics support.

Preplanning accomplished by the Kelly team included nearly 40 bridging contracts that allowed private enterprise to augment Air Force depot maintenance production efforts. Kelly's depot engine work has totally transitioned.

— Information provided by SA-ALC Public Affairs



The engine overhaul and repair work previously performed at the San Antonio Air Logistics Center has been transitioned to the Oklahoma City ALC at Tinker AFB, Okla., and to private contractors. Part of the work is being done at KellyUSA facilities by Lockheed Martin.



Transforming the C-5 Mission

Relocated through competitive sourcing

The programmed maintenance work on the C-5 Galaxy was identified for public-private competition by the Air Force in 1996. In August 1997, Warner Robins Air Logistics Center won the contract and the workload systematically moved to Robins AFB, Ga.

Kelly personnel and their Warner Robins counterparts embarked on a massive transition effort lasting nearly 20 months. The last C-5 repaired at Kelly was completed and delivered in early September 1998. The C-5 materiel management functions were realigned to Warner Robins with all transfers completed by June 1999.

— Information provided by SA-ALC Public Affairs

Innovative planning leads to early reuse of facilities

The Base Realignment and Closure process at most bases typically takes between 24 and 30 months. At these bases, base closure actions are completed and communities can then begin long-term use of facilities. They face many challenges associated with trying to attract tenants to vacated facilities.

At Kelly Air Force Base, Texas, innovative planning management that included full community participation led to long-term leasing of many facilities four years before its closure. Some of the innovations used at Kelly to accelerate the process were:

- Early joint planning sessions aimed at reducing duplication of effort;
- Adoption of the innovative management tools/techniques used by the team;
- Early appraisal of facilities and equipment and extensive sharing of appraisal assumptions with Greater Kelly Development Authority, or GKDA;
- Early establishment of environmental conditions so that leases could be executed;
- Coordination of the Air Force Environmental Impact Statement schedule with GKDA master plan schedule, facilitating concurrent, rather than sequential completion of critical tasks;
- Early negotiation of the terms and conditions of the economic development conveyance of property;
- Extensive coordination with federal and state regulatory agencies and other federal, state and local agencies who have an interest in the future use of Kelly property;
- Actions to allow commercial use of facilities soon after they were vacated by the Air Force.



Using Flexible Sustainment to accomplish C-17's mission

The C-17 Directorate will be moving from San Antonio Air Logistics Center to Warner Robins ALC at Robins Air Force Base, Ga. However, equipment managed by the C-17 directorate has transferred to Boeing. As a result, the C-17 directorate will transform the way it accomplishes its mission.

It will be supported using an interim contractor under a concept referred to as "Flexible Sustainment." The concept proposes the contractor will be responsible for configuration control, materiel management, depot level maintenance, support engineering, modifications and just-in-time spares management.

— Information provided by SA-ALC Public Affairs

Commodity organization realignment is successful

The aerospace equipment management directorate at Kelly Air Force Base, Texas, the largest commodity organization in the Air Force, has realigned its management responsibility to each of the remaining air logistics centers.

The aircraft accessories division realigned to Oklahoma City Air Logistics Center, at Tinker AFB, Okla., in the spring of 2000. The power systems division divided its missions: some moved to the Ogden Air Logistics Center, at Hill AFB, Utah, while others transferred to Oklahoma City ALC. The final segments — ground support equipment and automatic test systems — began realigning to Warner Robins ALC, at Robins AFB, Ga., during late 2000. The alignment will be completed this year.

Bridging contracts allowed private contractors to repair aircraft parts on demand when Air Force repair facilities encountered unexpected problems during the transition period.

Thus, Air Force readiness was preserved — a major accomplishment.

— Information provided by SA-ALC Public Affairs

Kelly takes proactive approach in transforming base infrastructure

Immediately after the Defense Base Realignment and closure commission voted to realign and close portions of Kelly Air Force Base, Texas, Air Force and San Antonio city leaders adopted a proactive strategy towards transforming Kelly's land and infrastructure.

The vision, planning, partnership and performance of the leaders who have seen this transformation through have resulted in one of the most successful base conversions since the base realignment and closure process began in 1988.

Diverse groups working together

This partnership included leaders from the San Antonio community, Greater Kelly Development Authority, Kelly officials, the Air Force Base Conversion Agency, the Air Education and Training Command, the Department of Defense Office of Economic Adjustment and many other organizations.

These diverse groups came together early on and agreed to work toward the common goal of transforming Kelly into a facility that would be a continuing source of pride for both the Air Force and the community.

A successful transformation

This transformation has been successful because of an early, clear and consensus-building vision on the part of the community and because both the Air Force and the community developed and stuck to an aggressive and comprehensive plan of action.

From the outset, the leadership team understood that Kelly's industrial nature and the complexity of its workloads would combine to make Kelly's transformation one of the most challenging base conversions ever.

Early and continuous Air Force and community coordination and planning efforts enlisted the full cooperation among all parties carrying out the BRAC process.

— Information provided by SA-ALC Public Affairs



Pictured above is the ceremonial groundbreaking of the Greater Kelly Development Authority administration building in 1999.

Moving forward by cleaning up the past

The Air Force is fully committed to the environmental cleanup of Kelly Air Force Base, Texas.

Kelly's pollution situation is the predictable result of industrial work at the base for many years before today's scientific knowledge and environmental laws existed.

Activities that were legal, appropriate and common to all industrial facilities included practices that would never be tolerated today. Kelly's cleanup program is the response to that legacy.

The Air Force has spent more \$160 million to find, measure and clean up past contamination at Kelly. Another \$320 million has been earmarked for further cleanup efforts.

Interim systems now in place treat and clean as much as 2,000,000 gallons of contaminated shallow groundwater each day.

The Air Force's goal is to have all systems in place by 2004 to clean up contamination. It is important to note that both the Texas Natural Resource Conservation Commission and U.S. Environmental Agency, or EPA, will have the final say on when the Kelly cleanup efforts are complete.

Normal environmental management activities at Kelly have also been transformed. Many of the Air Force's day-to-day environmental management activities have either been transitioned to Greater Kelly Development Authority, or GKDA, as they host new tenants in the redeveloped portion of Kelly or have transitioned to the Air Force Base Conversion Agency, or AFBCA, for further implementation.

The Air Force will remain committed to its environmental cleanup

responsibilities until the job is done, allowing final deed transfer of the property to GKDA. A highlight of the Kelly environmental transformation has been the accelerated turnover of facilities from the Air Force to new commercial tenants.

At other closing bases, areas where hazardous materials or wastes were created or stored were simply vacated, cleaned up and transfer document language prohibited future uses that involve hazardous substances.

At Kelly, shops and waste handling facilities are commonly critical pieces of the industrial process they support. New procedures

now close out Air Force activities in a way that separates past and future processes and protects the environment.

To facilitate Kelly's rapid transformation, a massive effort was launched to simultaneously accomplish environmental closure activities while accommodating redevelopment.

This effort required the coordination and cooperation of the following organizations: Kelly Environmental Management; AFBCA environmental personnel; Air Force and Defense Department policy makers; EPA; GKDA and commercial tenants. The result of this effort has been a resounding success. To date, no environmental issues have impeded new job creation efforts for San Antonio.

KellyUSA is now a showcase of sound environmental management by GKDA and its tenants, combined with uninterrupted efforts by the Air Force to complete environmental cleanup.

— Information provided by SA-ALC Public Affairs



The Air Intelligence Agency will become tenants of Lackland Air Force Base, Texas, when Kelly AFB realigns with Lackland on July 13, 2001.

Joining forces — Kelly and Lackland unite as one base

On July 13, 2001, portions of Kelly Air Force Base, Texas, principally the airfield and areas to its west, will realign and become part of Lackland AFB, making it one of the largest Air Force bases in the world.

The area of Kelly transferred to Lackland will become known as the Kelly Field Annex of Lackland. The airfield remains known as Kelly Field, maintaining its proud legacy as the oldest continually active military airfield in the country.

The transformation of Kelly Field will be achieved when the Greater Kelly Development Authority, or GKDA, and Air Force joint use agreement is completed. Once granted, Lackland will operate the airfield while GKDA will use Kelly Field for redevelopment related purposes.

Some of the Kelly tenant organizations, including Headquarters, Air Force News Agency; the Defense Commissary Agency Midwest Region; the Defense Information Support Agency; and others will continue to occupy their current facilities as tenants of GKDA. The Air Force will transfer ownership of their facilities to GKDA and these organizations will lease back the space they need. A number of other Kelly tenants, including the Air Intelligence Agency, the 433rd Airlift Wing of the Air Force Reserve Command and the 149th Fighter Wing of the Texas Air National Guard will become tenants to Lackland.

Other organizations becoming part of Lackland but occupying facilities in leased space east of the airfield, such as the InterAmerican Air Forces Academy, will remain as GKDA tenants until suitable facilities can be constructed for them on the Kelly Field Annex or on Lackland.

— Information provided by SA-ALC Public Affairs

Kelly's history for sale — buy your copy now

The Kelly Air Force Base, Texas, legacy and heritage are a strong current that runs across the service members and civilians whose memories of the base run deep.

It's also a strong theme for Ms. Ann Hussey, the woman tapped to capture Kelly's legacy in words for the third and final edition of a pictorial history of Kelly tentatively titled "*A Heritage of Service: Eighty-Five Years of Military Aviation at Kelly Air Force Base, 1916-2001*."

The book, expected to encompass some 450 pages and more than 500 color and black-and-white photographs, will trace the base's legacy from its opening Nov. 21, 1916 to its closing July 13, 2001, and will include pictures of Kelly's closing ceremony.

The writer said she is prepared for this labor of affection. She served as the San Antonio Air Logistics Center's History Office chief from December 1986 to June 1998. Since then, she has served as staff historian for the Air Education and Training Command at Randolph AFB, Texas.

The final edition is an opportunity to add to the existing text, she said. For instance, the book will include a vignette of the 49 plus 1, a group of African-American civilians during World War II who were asked to volunteer to assist the Tuskegee airmen.

"I had no idea this group existed when we published the book in 1992," she said. "It's my pleasure to be able to add the information and give these 49 men and one woman the recognition they so richly deserve."

Two chapters will be added to the earlier edition. "One chapter will focus on Kelly's history from 1991 to 1995," Ms. Hussey said. "The other chapter will cover 1995 to the end. This chapter will be hard to write because of all the emotion sur-



The main gate at "Kelly Field" in 1917.

rounding the base closure."

The Kelly Heritage Foundation, or KHF, is handling all costs associated with publishing the book. "The foundation is pleased to sponsor this book as a way for the Kelly family to preserve its memories after the air logistics center closes and the base realigns," said Mr. Tommy Jordan, KHF president.

Mr. Jordan emphasized that once the last order is taken July 13, no more will be accepted. "We're going to accomplish one printing of the book for the number of orders we receive through July 13, and no more," he said.

Kelly supporters are encouraged to order a copy of the book. To do so, visit the Kelly Air Force Base Public Affairs Web link, <http://137.242.1.211/Historybook.htm>, and print out an order form.

Complete the form and make a check out to "Kelly Field Heritage Foundation" in the amount of \$27.50. Mail both to Ms. Lynda Wampler, Kelly Field Heritage Foundation, P.O. Box 37423, San Antonio, TX 78237.

— *Master Sgt. Dorothy Goepel, SA-ALC Public Affairs*

Special closing festivities "Salute Kelly"

For eight prosperous decades Kelly Air Force Base, Texas, made significant contributions to the military strength of the United States. On July 13, 2001, Kelly will officially close.

As this era comes to an end, special closing festivities will be held to "Salute Kelly" and to honor the men and women who provided highly technical, management and executive support to this Air Force logistical giant. These events are for all current and former Kelly Field employees and friends.

Plans are almost finalized for the festivities and announcements. Those wishing to receive an announcement may do so by sending an e-mail with names and addresses to: lynda.wampler@kelly.af.mil or shirley.roeder@kelly.af.mil.

The closing events are listed below:

July 12, 2001 — "Kelly Forever"

Golf Classic: Florida Scramble — shotgun start at 12:30 p.m. To be held at the Kelly and Lackland Golf Courses. The

cost of the golf classic is \$50.

July 13, 2001 — The "Kelly

Forever" Dinner: The dinner will be held at the Henry B. Gonzalez Convention Center. The Honorable Kay Bailey Hutchinson, Senator, and Gen. John Hand, Air Force Vice Chief of Staff will serve as keynote speakers. The Air Force Band of the West will provide entertainment.

July 13, 2001 — Formal Closing

Ceremony: The ceremony is planned for the afternoon in front of Building 1680, which currently houses the offices of the San Antonio Air Logistics Center Commander. Tentative plans call for the ceremony to be held at 1 p.m., followed by a reception at the officers' club.

The final edition of "*A Heritage of Service: Eighty-five Years of Military Aviation at Kelly AFB, 1916-2001*," is currently being revised and will be going to press in mid-July. It will be a hard-bound book and will contain approxi-

mately 450 pages and more than 500 photographs of both color and black and white of Kelly from cradle to closing. These may also be ordered through Ms. Wampler or Ms. Roeder.

Those wanting to give a tangible honor to an individual or group of people can do so by making a financial contribution to the veterans' monument, which is dedicated to all past and present military veterans and their civilian counterparts. The financial cost of maintaining the monument is supported through private donations.

A donation to honor an individual costs \$30 for a brick and up to three lines at 12 characters per line may be engraved. A donation to honor a family or group costs \$150 and up to 10 lines at 25 characters per line may be engraved. Bricks may also be ordered by contacting Ms. Wampler or Ms. Roeder at the e-mail addresses above.

— *Ms. Shirley Roeder, SA-ALC*

Life after closure: AFRL provides anchor for Griffiss redevelopment



An entrance gate for the former Griffiss Air Force Base, N.Y. Griffiss completed its 1993 Base Realignment and Closure Commission ordered realignment on September 30, 1995.

Six years after Air Combat Command security guards left their posts for the final time at Griffiss Air Force Base, N.Y., Air Force Research Laboratory scientists and engineers continue research programs and provide the centerpiece for redevelopment efforts.

"The former base has been successfully transformed into the Griffiss Business and Technology Park," said Mr. Steven DiMeo, executive vice president of Mohawk Valley EDGE, the economic development agency charged with redeveloping the property.

"From established international corporations such as BAE Systems and Orion Bus Industries, to exciting ventures such as Baker Electromotive and Morgan Truck, more than 40 companies call Griffiss home and employ more than 3,300 people," he said.

"With growing manufacturing and technology firms helping to lead the way, more civilians work at Griffiss today than did when it was an active military facility," he continued. "The marketing of sites and facilities is ongoing and several companies and site selection firms are looking at Griffiss for expansion projects."

The AFRL Rome Research Site, which evolved from Rome Laboratory in 1997, today remains the largest employer at Griffiss. It has a staff of nearly 825 civilians and military personnel, complemented by more than 400 on-site contractor employees.

A stand alone facility

In June 1993, when the Base Realignment and Closure Commission, or BRAC, voted to realign Griffiss and move its active flying mission, it directed that Rome Laboratory continue operations as a "stand alone" facility on federally retained property.

Accomplishing that mandate took laboratory personnel through uncharted territory and created an entity unique to AFRL, if not the entire Air Force. Laboratory staff became responsible for the wide array of support services once provided by the host unit, from security and supplies to utilities and unit-level communications. All support had to be organically developed.

Business model

"The BRAC decision actually had a positive impact on the

laboratory," said Mr. Raymond Urtz, director of the AFRL Information Directorate. "Since we were now responsible for all of our own support needs, we could begin to operate as a business would. We knew all of our costs because we paid all of our bills — a situation unique among Air Force organizations of similar size."

AFRL studies have indeed concluded that the information directorate is the most cost-efficient organization in the laboratory because of the business model it adopted.

Realizing new paradigms

Although much attention has been paid to the positive outcome for the Rome Research Site from an operations standpoint, the real payoff has been from a technology perspective and new paradigms for state and federal government cooperation.

Concerned with the closing of Griffiss, state officials seized the opportunity to capitalize on federal technology to create jobs by establishing the New York State Technology Enterprise Corporation, or NYSTEC.

NYSTEC was established at Griffiss with the mission to leverage military technology to benefit New York businesses and government entities. "In a sense, NYSTEC has become a smaller, private-sector twin of AFRL-Rome Lab, but with a focus on non-defense technology," said Mr. Edwin Schreiner, NYSTEC president.

Since the business of the Rome Research Site is primarily information technology and information technology is the growth area of today, NYSTEC has already paid huge dividends to the state — both in job creation and in state government efficiency.

Others take notice

Other parts of the federal government also took notice of the benefit of partnering with leading edge Air Force research. The U.S. Department of Justice charted a similar course with the establishment of the National Law Enforcement & Corrections Technology Center — Northeast Region and also co-located it with the information directorate.

This partnership allows the Department of Justice to draw upon Air Force research to help it assess, adapt and develop

products and technologies designed for the military, and transfer them to law enforcement, corrections and other criminal justice applications.

The development of strategic partnerships has become a new business paradigm in the conduct of research by the information directorate. Officials have leveraged one of the directorate's principal technology areas — information assurance — for economic and academic growth.

Information assurance

Information assurance forms the centerpiece for cooperative efforts at the state and national level. One aspect of this endeavor was the creation of an information assurance institute in collaboration with Cornell University. The Information Institute, a cooperative educational partnership with more than 50 institutions from across the nation, looks at solving broad information technology problems as they apply to command and control in the Air Force.

Breaking ground

On Nov. 1, 2000, Air Force and New York State officials broke ground for a \$23.8 million AFRL Information Directorate research facility that will consolidate research and development operations, while further trimming overhead costs when it is completed in October 2002.

The consolidation project is the result of joint funding and support by the Air Force Military Construction Program and New York State's Empire State Development Corp., which provided a \$12 million grant toward the facility.

This will be the new home of an invigorated directorate doing leading edge technology using new business and operating paradigms.

Six months earlier, Brig. Gen. Paul Nielsen, AFRL commander, participated in groundbreaking ceremonies for a new \$45.6 million Rome Free Academy high school at the Griffiss Business and Technology Park. The new school is scheduled to open for the 2002-2003 school year.

In the beginning

Griffiss was activated in February 1942 as the Rome Air Depot. The depot's initial responsibilities involved storage, maintenance and shipment of equipment for the Air Logistics Command.

Rome Air Depot was renamed in September 1948 in honor of Lt. Col. Townsend Griffiss of Buffalo, N.Y., an Army Air Corps pilot who died in an aircraft accident in England in 1942 — the first U.S. airman to lose his life in the European Theater during World War II.

Griffiss Air Force Base completed its 1993 BRAC-ordered realignment on Sept. 30, 1995, leaving the then Rome Laboratory, the Defense Finance and Accounting Service Center and the Northeast Air Defense Sector (operated by the Air National Guard) as the major remaining Department of Defense activities.

— Mr. Francis Crumb, AFRL Public Affairs



The AFRL Rome Research Site, which evolved from Rome Laboratory in 1997, today remains the largest employer at the Griffiss Business and Technology Park on the site of the former Griffiss Air Force Base, N.Y.

Life goes on...

Mr. Dave Levingston AFMC Public Affairs

I find my own private markers in little things and generally avoid ceremonies. But there are exceptions.

For me, the base closure ceremony for Newark Air Force Base, Ohio, Sept. 17, 1996, was a big exception.

Even though I had a new job at Air Force Materiel Command, Wright-Patterson AFB, Ohio, six months before the closure, I always knew I would have to go back for the ceremony. And I'm glad I did.

Military ceremonies are full of meaning and tradition. After all, they developed as a means for communicating

important changes that had to be understood by all members of a unit.

And so I found myself standing under a cloudy sky in a brisk wind watching the Newark base flag slowly being rolled up while taps played in the distance.

As the flag disappeared with its emblem that I had seen so many times in the 14 years I worked there, the meaning was clear.

Newark had done its job. After providing the accuracy for America's missiles from the Cuban missile crisis to the fall of communism, it was time for something new. The cold war is over. We won. Newark played a role in making that victory possible. That's quite a legacy.

The story isn't over. Newark is closed, but the work goes on under new privatization-in-place contractors. And many of the same people are still working at the

same jobs, but now for contractors.

So, Newark is gone, its flag cased and stored away. But for those of us who worked there, who were Newark Air Force Base, the closure was as much a beginning as it was an ending.

The ceremony is over, but lives go on. The work of keeping our missiles and aircraft accurately on target continues. The people who made Newark a success will continue to make the world a better place, whether working on the same job for a contractor, or off on a new job in a new place.

The legacy continues.

Editors note: Newark Air Force Base was slated for closure by the 1993 Base Realignment and Closure Commission. It ceased military operations on Oct. 1, 1996. Mr. Levingston served as its public affairs director.



Welcome home

EDWARDS AIR FORCE BASE, Calif. — The space shuttle Atlantis touched down on the Edwards flight-line Tuesday afternoon, Feb. 20, after poor weather on the east coast prevented it from landing in Florida. This is the second time in four months the shuttle landed at Edwards.

YOFAM Web site offers one-stop shopping

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — Air Force Materiel Command officials recently launched the new, redesigned AFMC Year of the Family Internet site.

There are two web sites with the same content, said Ms. Niki Foor, AFMC's family matters chief.

One is a public site accessible from home computers and the other is a government site accessible only if using a computer within the "dot-gov" or "dot-mil" domain.

"The web site is a direct result of an AFMC Community Action Information Board initiative and provides a logically organized, easily accessible link to all quality of life pages on an installation," Ms. Foor said.

The site includes information like new quality of life services, family feedback and more. People can also make suggestions for new or improved services, as long as they have command-wide use.

People wanting to access information from their home computers should visit: <http://afmc.wpafb.af.mil/public/HQ-AFMC/DP/YOFAM>.

The restricted web address to access the page from the military domain is: <https://www.afmc-mil.wpafb.af.mil/HQ-FMC/DP/YOFAM/>.

—Reported by AFMC Public Affairs

AFRL develops small aircraft technology

ROME, N.Y. — Air Force Research Laboratory and industry researchers have developed cost effective technology which allows Air Force fighters and general aviation aircraft to meet new and evolving air traffic control restrictions imposed by the Federal Aviation Administration and international governing bodies.

Engineers from AFRL's, Information Directorate at Wright-Patterson AFB, Ohio, teamed with Rockwell Collins' Avionics and Communications Division to demonstrate hardware and software products.

"We developed the Miniature Modular Digital Radio which uses off-the-shelf components, patented software and a direct conversion receiver architecture that meets all global air traffic management radio frequency requirements in an incomparable combination of small size and low cost," said Mr. Joel W. Arnold, program manager in the directorate's platform connectivity branch.

Non-compliance with planned air traffic control requirements would have both cost and mission impacts.

By expanding into this huge market, the cost of both commercial, off-the-shelf components and finished products for the military will be reduced by the economy of scale. In addition to AFRL's lead platform connectivity branch, two commercial divisions of Rockwell-Collins are participating in the development — the air transport and general aviation divisions, thus ensuring direct marketing paths to the commercial world.

In addition to its primary focus, hardware and software byproducts developed have already been or are planned for transition to a number of military and commercial applications with projected savings in the hundreds of millions of dollars.

—Reported by AFRL Public Affairs

OSI agents foil fraud scam and return \$16 million to AF

EGLIN AIR FORCE BASE, Fla. — Three Air Force Office of Special Investigations agents returned more than \$16.5 million to the Air Force recently and were presented Defense Department

outstanding achievement awards.

Special agents Mr. Alex Keechle, Ms. Susan Chandler and Mr. Scott Corbitt received the awards from Maj. Gen. Michael Wiedemer, Air Force Materiel Command director of requirements, and Mr. Glenn MacTaggart, assistant United States attorney, western region, during an AFOSI Region 1 detachment commander's conference at Eglin.

In 1984, the San Antonio ALC at Kelly AFB, Texas, received a foreign military financed contract worth \$2 billion on behalf of the Kingdom of Saudi Arabia to construct a command, control and communications air defense system. AFOSI initiated an investigation after an audit indicated the contractor made false claims against the government.

The investigation recovered \$16.5 million, the largest civil settlement recovery ever obtained for the government.

Although the contract concerned constructing an air defense system for the Saudi Arabian kingdom, the contract was actually administered at Kelly by Air Force officials and civilian workers in San Antonio.

—Reported by AAC Public Affairs

Energy crisis could affect Los Angeles AFB

LOS ANGELES AFB, Calif. — California is beginning a third month of power alerts that bring the threat of power curtailments through "rolling blackouts."

The California Public Utilities Commission approved a temporary 15 percent price hike. Los Angeles AFB is also subject to this increase. Higher costs could prompt cancellation of facility improvement projects.

The base consumed more energy in December 2000 than in December of 1999. If this trend continues, the base will pay more through increased rates and it will also be penalized for rising consumption. The weather can't be blamed. December was mild, according to the National Weather Service.

"The base must use energy to carry out SMC's mission. Using more than is needed can be wasteful and expensive," said Mr. Ed Wilson, Los Angeles AFB Energy Program Manager. "Conservation is the least expensive and most logical approach to save base funding," he said.

—Reported by AFMC Public Affairs

X-35C completes testing



Lockheed Martin's X-35C Joint Strike Fighter Concept demonstrator makes another sortie above Edwards Air Force Base, Calif. After being flown at Edwards for two months, the X-35C was moved to Naval Air Station Patuxent River, Md., for further testing.

Lockheed Martin's X-35C Joint Strike Fighter concept demonstrator completed its flight-test operations at Edwards Air Force Base, Calif., and flew to Naval Air Station

Patuxent River, Md., in early March.

At Patuxent River, X-35C test pilots will fly in sea-level conditions, which will provide a more accurate picture of the concept demonstrator's carrier-suitability

performance — Edwards' elevation is about 2,000 feet.

To prepare for the cross-country flight, X-35C test pilots completed tanker qualification tests with a KC-10.

The fighter logged its 18th, 19th and 20th flights at Edwards on Jan. 23, continuing field carrier landing practice tests, or FCLP, expansion of the flight envelope and initiating tanker-qualification trials.

Lt. Col. Paul Smith, deputy director for the JSF Test and Evaluation Support Office, and X-35 chief test pilot Mr. Tom Morgenfeld each flew the X-35C for the first time then.

Both had flown the similar X-35A extensively during that plane's flight-test program. Currently, the X-35C flight test program has produced more than 44 FCLP landings to touchdown.

"Precision-approach handling qualities were excellent," Mr. Morgenfeld said.

"Response to various combinations of bank angle and pitch-attitude changes was expeditious, smooth and predictable," he said.

—Reported by AFFTC Public Affairs

Space-based laser hits key milestone

The Space-Based Laser Integrated Flight Experiment took a big step forward recently by completing the last hurdle towards its third system requirements review, planned for March.

The requirements review was the last hurdle on the way to the integrated flight experiment's first major program review, its system requirement review. It will culminate in the approval of the top-level system specifications for the integrated flight experiment. It also clears the way for the preliminary system design to move full speed ahead. The experiment is planned for launch in 2012.

More than 170 participants from the Space and Missile Systems Center, Ballistic Missile Defense Organization, Air Force Space Command, Air Force Research Laboratory and the laser's integrated flight experiment joint venture contractor team attended the review at Aerospace Corporation in Los Angeles.

"Our top priority now is establishing the program's baseline," said space-based laser's program director, Col. Neil McCasland. "The requirement review was a successful, productive step on the road

to a solid baseline and I'm upbeat about what we'll find during systems review."

The team also studied recommendations from the High Energy Laser Affordability and Architecture Study, which provided insight into ways the integrated flight experiment could help reduce the overall risk of developing an affordable future operational SBL system.

Reducing complexity has the potential to reduce both risk and cost. Tradeoffs can provide significant risk reductions. In this case, some power and range were traded in favor of increased laser fuel. The smaller gain generator also produced space and weight savings on the integrated flight space vehicle. After the rebalance study, the team moved away from a deployable mirror in favor of a monolith.

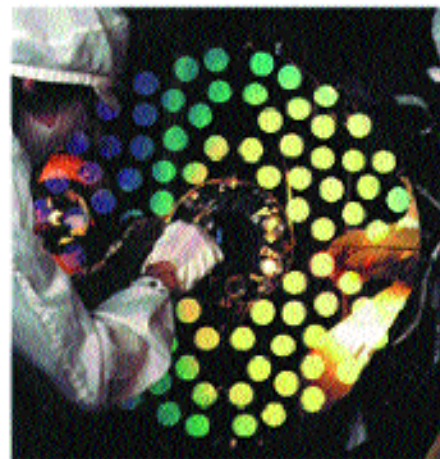
The requirement review made clear the Space-Based Laser team's commitment to risk reduction, buying down risk at every stage in order to achieve the program's many technically challenging goals.

The Space-Based Laser integrated flight experiment risk reduction plan was highlighted in an award-winning paper co-authored by members of the SBL pro-

ject office and the Joint Venture.

"The focus for Team SBL-IFX in 2001 is to make further progress on a very complex system design while continuously looking for ways to reduce risk and ensure success. Achieving that difficult balance is the key to the program's long-term success," said Col. McCasland.

— Maj. Arnold Strelend, SMC



Technicians from team SBL-IFX make adjustments to beam quality sensors on a test mirror as part of the ongoing SBL Integrated Flight Experiment Risk Reduction Program.



Robot delivers precision pharmacy service

The newest member of the 78th Medical Group Pharmacy team just isn't human — no breaks, no leave, no flu shot. That's because the new face around the pharmacy is a robot.

Curiously, while the newest electronic kid on the block is beyond doubt a 21st century concept, in one respect it takes the pharmacy back to the good old days of neighborhood corner drug stores when pharmacy staffs had time to provide personalized service and counseling.

The time saved is used to provide personal service, thereby filling the gap caused by personnel shortages. It has also helped the pharmacy maintain what has been among the Air Force's lowest error rate and waiting times — an average 5.8 minutes, including 8.6 for new prescriptions and three minutes for refills.

Seconds count in the busy Robins Air Force Base, Ga., pharmacy, which processes an average of 1,600 prescriptions daily and 33,000 per month. Robotics currently fill 300 to 400 prescriptions daily. When the robot begins processing civilian prescriptions, the numbers will increase to 600-700 per day.

The robot's principal advocate is Capt. Jack Wright, chief of pharmacy services. He has guided the system's installation and implementation. He's sold on the machine — a robotic prescription dispensing system made by ScriptPro — because of its ability to enhance services. The robot is just part of the pharmacy's new image, set against a backdrop of the 78th Medical Group's

new building with its added efficiency, comfort and eye appeal. A second initiative, an automated numbering system, gives beneficiaries the freedom to move about while prescriptions are filled. Another provides a computer cross reference to flag possible drug interactions.

"Pick 'n' stick" function

Capt. Wright said the robot is central to the new look and operation. It is one of a handful of such systems in operation in pharmacies in the United States. It processes a portion of the prescriptions from in-house providers, performing time-consuming and tedious tasks of counting medications, filling vials and labeling prescriptions. The system can fill up to 100 prescriptions per hour so that customers get their medications promptly, even during peak pharmacy hours.

Med Group providers enter prescription data into a composite healthcare computer system, which sends an electronic form of the prescription to the pharmacy.

The pharmacy robot gathers the information and begins to process the prescription. The system now holds 205 commonly prescribed medications and has room for more.

The robot grabs an appropriately-sized vial based on the quantity of the prescription. Its large arm moves the vial to a cassette containing the correct medication. The machine scans the cassette via a bar code system, counts out and drops the correct medication into the vial. The vial moves to a labeling station, where appropriate label instructions are printed.

Once the vial is labeled, it moves to a checking station, where pharmacy personnel verify the prescription by scanning a bar code. The bar code is unique to each prescription, and it allows the person who is checking the prescription to verify the correct medication, dose and patient. The final check done, the prescription is ready to be dispensed to the patient.

The process takes on average 30 to 45 seconds per prescription, and because of the barcode technology, is virtually error free. For example, before a stock drug is loaded into the machine, a barcode verifies the drug against a national drug code, manufacturer drug code and the ScriptPro database. As a fourth check, pharmacy personnel verify the correctness of the drug by viewing a picture of the tablet generated by ScriptPro software and comparing it to a drug in the bulk manufacturer bottle.

Built-in safeguards

An additional pharmacy computer system allows interaction between a medication filled at the Med Group pharmacy and a medication filled at a downtown TRICARE pharmacy.

"While this adds a few seconds to the processing of each prescription, it is well worth it for enhanced patient safety," Capt. Wright said. "Since we have had the system, we have caught more than 15 potentially severe drug interactions of therapeutic overlaps. In several of the examples, patients would have prescriptions filled at a TRICARE network pharmacy and then have a prescription filled at the 78th Medical Group pharmacy for a similar class of medication. By screening these overlaps, we have possibly prevented harmful therapeutic duplications."

The numbers game

The automated numbering system helps patients be aware of when their medication is ready. Patients receive a numbered

See Robot on next page

BRAC impacts Tinker

The closing of two Air Force air logistics centers — Kelly Air Force Base, Texas and McClellan Air Force Base, Calif. — has meant big changes for the Oklahoma City Air Logistics Center. More work, more people and more equipment have made their new home at Tinker Air Force Base, Okla.

Over the course of the last three years, more than a thousand Kelly and McClellan employees have come to call Tinker home. Many of these workers came as part of the hard-won propulsion business area contract award. Under this contract, about 370 people came from Kelly to work production of the F100 aircraft engine. With this workload, more than 32,000 pieces of equipment and tools also made the trip and have been inspected, repaired and are fully operational in their new home. Due to a lot of hard work from every angle, this was accomplished 15 weeks ahead of the original schedule.

In spite of uprooting their homes and families, this incoming work force wasted no time getting acclimated.

Increased production

As of last August, full production capability was reached on all six major engine modules — core, inlet fan, low and high-pressure turbans and generators — as well as whole engines and accessories. Even though there are still some parts support issues, production has increased significantly.

“During the month of December, we produced a total of 438 F100 Management of Items Subject to Repair items, a significant increase over past months,” said Ms. Maryann Holt, F100 program analyst.

“Several measures are in place to improve our processes such as ‘kitting’ in the inlet fan area,” she said. “This means supply parts and routed items will be consolidated into a single kit for mechanics. This will enhance parts ordering, improve inventory accountability, optimize shop arrangement and increase production capability.”

Over and above the contract workload, several other workloads transferred from Kelly and McClellan. Three new divisions stood up in the airborne accessories directorate with 67 percent of the personnel fills being made from Kelly and McClellan. Kelly employees numbering 429 transferred with the air traffic and landing systems, airborne generators and high frequency global communications systems workloads. In addition, 45 McClellan people transferred with the aerospace accessories and propulsion workloads. Seven or eight semi-truckloads of records accompanied these jobs to Tinker.

The airlift tactical trainer propulsion division also stood up in



Tinker plant management division employees, Mr. Jim Quinalty, Mr. Cloward Howd and Mr. Jimmy Hudson, from left, roll one of the first delivered pieces of propulsion equipment into its new home.

the propulsion management directorate with 148 workers from Kelly supporting more than 9,500 engines with an annual budget of approximately \$300 million.

The Kaizen process

Because of the various workloads arriving in the center over the last two years and the criticality of space, a process known as Kaizen, or lean cell, was initiated. Kaizen is a planning and implementation process used by unit management and the work force to affect the flow of work and travel time of staff during the repair process.

“For instance, prior to Kaizen, a part from the F100 core assembly shop traveled 6,800 feet within the shop during the repair process,” said Lt. Col. Ray Baker, engineering and planning branch, propulsion management directorate. “After the Kaizen, the same part traveled only 3,740 feet, a 45 percent reduction.” To date, Kaizen has been performed 14 times in an effort to make the repair process more efficient.

Employees arrived from McClellan and Kelly to not only handle incoming workloads but also to perform jobs which already existed within ALC and elsewhere on the base. This includes performing depot maintenance on the KC-135s, E-3s and on the ejection seats of the B-52 and the B-1B bombers.

—Ms. Gail Kulhavy, OC-ALC Public Affairs

Robot — continued

ticket which also appears on a lighted board in the pharmacy waiting area when their order is complete. This allows more freedom for patients without fear of missing their call. They can simply check the board to see if their number is up. It also helps to ensure patient privacy.

Patients can still wait in the pharmacy lobby, but as an added feature, electronic

signs are located in the clinic break area behind the pharmacy. There is also a coffee cart, soda and snack machines. There, patients can check the sign or hear an announcement from speakers attached to the system to determine when their prescriptions are ready.

The numbered claim ticket prints out the average prescription waiting time. Patients can use the waiting time to make

a quick trip to the lab or run another errand in the building.

Before the Med Group installed the system, patients weren't certain what pharmacy window to use for new prescriptions, refills or provider order-entry. The new system displays the appropriate window for the required pharmacy service.

—Ms. Chris Zadrakas, 78 ABW/XPRA

AFCEE's 'Indiana Jones' digs the past

Author Jack London did not have him in mind when he wrote his classic adventure novel *Call of the Wild*, although Dr. James Wilde's calling always has been America's wilderness.

As sole archaeologist at Brooks Air Force Base, Texas, he truly "digs" the past, especially at bases where his skills as an anthropologist help preserve our cultural heritage.

Since 1995, Dr. Wilde has been a sort of "Indiana Jones" for the Air Force Center for Environmental Excellence's Consultant Division.

Unlike the fictional movie character who was lured into action by danger and the thrill of the hunt, Dr. Wilde's motivation to explore often remote and inhospitable places for ancient artifacts is founded on his Air Force commitment to help manage and protect cultural and historical resources.

Protecting natural resources

"I see my job as helping people solve problems related to cultural resources," he said. "I work with people from all over the world and in nearly every U.S. state."

One of about a dozen Air Force archaeologists, Dr. Wilde works with leaders to ensure the Air Force is complying with federal law governing historic preservation.

The two primary federal laws that affect operations, ranging from base closures to land development, are the National Historic Preservation Act of 1966 and the Archaeological Resources Protection Act of 1979.

"Any federal undertaking that has the potential to disturb historical resources requires consultation with the affected people," he said.

The federal government is particularly sensitive to Native Americans' concerns, Dr. Wilde said, noting that federal law mandates that native peoples' resources be identified and protected.

The National Historical Preservation Act requires that all federal land must be assessed for cultural and historical resources. These resources include historic buildings and artifacts.

"There are cultural resources on and near every Air Force base," he said, citing in particular F.E. Warren AFB, Wyo., that

was built on the site of Fort D.A. Russell, a mid-1800s Army post.

"There are many historic buildings there that we're trying to preserve through adaptive re-use," he said.

Success stories

Dr. Wilde works with contract archaeologists and state historic preservation offices to identify and protect historically significant resources.

An Air Force preservation success story is Brooks World War I-era Hangar 9. However, there are many historic structures that have yet to be preserved, he said, including Cold War-era facilities such as former Strategic Air Command hangars, alert stations and weapons bunkers.

Unfortunately, the task of Air Force historical resource preservation is daunting. Since the 1980s only 1.5 million of the 9 million acres of Air Force property have been inventoried for culturally significant resources.

As of fiscal 1999, 10,154 archaeological sites have been discovered on Air Force property, 30 of which are now listed on the National Register of Historic Places.

Working with BRAC bases

Many of these sites have been discovered during base closure surveys. Dr. Wilde said the former Plattsburgh Air Force Base in New York yielded many historically significant resources from the French and Indian Wars and the War of 1812.

Eglin AFB, Fla., is one of Dr. Wilde's favorite places because of the numerous sites there, including a British colonial site dating to 1690.

During salvage operations at this site, partially destroyed by Hurricane Opal in 1996, Dr. Wilde and Eglin archaeologists Dr. Newell Wright and Mr. Tegan Swain made an interesting discovery.

"I helped the Eglin crew excavate beneath the British house site. It was the most fun I've had while working for the Air Force," he said of his digging beneath the floor of the old structure. Buried about two and a half feet below was an ancient "time capsule."

"We discovered pottery from the Weeden Island Culture that existed along the Gulf Coast in Florida and Alabama



Top: Dr. James Wilde's excavation team at work at the Baker Village archaeological site near Nellis AFB, Nev. (Circa 1994)

Bottom: One of Dr. Wilde's student volunteers measures alignment of excavated areas at Baker Village.

between 300-1200 A.D.," he said.

Sometimes significant discoveries are made at Air Force bases overseas.

"Pacific Air Forces called me wanting surveys at Misawa and Yokota Air Bases because they were planning to develop certain areas there," Dr. Wilde said.

The 1997-1998 surveys unearthed a treasure trove of Japan's ancient past.

See Wilde next page



Dr. James Wilde

Wilde - continued

"Some of the earliest pottery in the world was found, from the Jomon period up to the more recent Haji period," he explained.

Additionally, photo documentation was conducted at Yokota AB of World War II Japanese Army and Air Force buildings and an ammunition plant located in caves in the nearby Tama Recreation Area.

Walking on the "Wilde side"

At home, however, AFCEE archaeologist's 'walk on the Wilde side' involves surveying large land tracts. "Air Force ranges are our biggest areas for assessing cultural resources," he said.

The largest of these is the 3.5 million-acre Nellis AFB range. Dr. Wilde said about 20 percent of Luke AFB in Phoenix, Ariz., 2.7 million-acre Goldwater Range has been assessed for cultural resources.

Looters beware

Part of this massive assessment is determining how much damage has been done by looters who steal artifacts from federal land.

"We've had some problems with looting at sites in California and Utah," he said. If caught, violators face a \$10,000 fine and or one-year in prison.

The 50-year-old New Mexico native, who once hunted ancient artifacts as a child with his scientist father, is still thrilled by finding what laymen call "buried treasure."

During the past four years, Dr. Wilde truly has resembled "Indiana Jones" while directing desert excavations at Baker Village in Nevada, a 700-year-old Fremont Culture site.

— Mr. Rudy Purificato, 311th HSW

Reservist fills need during squadron stand down **IMA takes command**

The colonel who recently took over as commander of the 76th Security Forces Squadron, Lackland Air Force Base, Texas, is a different type of commander than most of her colleagues.

That's because Col. Cindy Hazelton, who has served in the Air Force for a total of 25 years, isn't just a reservist — she's an Individual Mobilization Augmentee, or IMA, as well.

One of the first

Col. Hazelton said although she does not know of any IMA who has served as a commander in Air Force Materiel Command, she's fairly certain about one thing. "If I'm not the first IMA to serve as a squadron commander in AFMC, I'm probably the first female IMA commander," she said.

The role of an IMA originally was to serve in a unit as a backfill for deployed positions. Now, augmentees come in and supplement units wherever there's a need. Col. Hazelton said downsizing has created a bigger role for the IMA.

Integrated to command

"The IMA program is a thoroughly integrated program here at the squadron and much different than it was when I first got here 14 years ago," she said.

"Today, IMAs perform all duty func-

tions here in the squadron, from entry control point to investigations and flight sergeants. I think I've had a positive mark on the active duty thinking of reservists as part of the total force," Col. Hazelton noted.

Col. Hazelton sees herself as a role model for those in the IMA program as well as women serving in the Air Force. "I want female security forces airmen to see it's possible to be a female and obtain rank and a command position," she explained.

Col. Hazelton said she was able to become commander of the 76th SFS by spending a lot of time in the squadron on her own time whenever she was needed, by building credibility and by educating people on the IMA program. "I think all that hard work has paid off," she said.

She sees her job responsibilities as commander of the 76th SFS as fairly clear cut.

The mission

"My primary goal as commander of the 76th SFS is to make the transition to Lackland AFB, Texas, as smooth as possible, make certain our people are trained and ready to perform the mission at Lackland and ensure they are being taken care of," she said.

—Mr. Richard Zowie, SA-ALC Public Affairs



Lt. Col. Cindy Hazelton accepts the 76th Security Forces Squadron guidon from 76th Support Group Commander Col. David Beecroft during the 76th SFS change of command ceremony.

Edwards AFB award-winning crewchief began as secretary

Hard work and dedication propelled clerical worker, who took a chance on change, onto the flightline and beyond.

A civilian maintainer who began her civil service journey here in 1984 has worked her way to the flightline, making the transition from secretary to crewchief.

Not only has Ms. Stacey Leach, 412th Test Squadron Shadow Flight, made a major career transition, the Air Force Test Pilot School Class 00A nominated her as Edwards' distinguished crewchief for 2000. In addition, Ms. Leach was made the guest of honor at the class graduation ceremony.

The extra mile

"I was really jazzed," Ms. Leach said. "All the people I work with work just as hard as I do. I guess I just try to go further than what's expected of me, but I still don't know how they picked just one winner."

Shadow Flight's maintainers support test pilot school students when they train in T-38 and F-16 aircraft here.

Ms. Leach and her co-workers perform maintenance and pre-and post-flight inspections on those aircraft. They also help pilot school users get familiar with the aircraft, parachute, oxygen, intercom and other equipment.

"Our job is to make them comfortable," explained Ms. Leach. "I have to get to know the people I launch."

They're really people, not just pilots, students or officers. These are people's husbands, sisters, fathers, daughters."

Suited for the job

It's Ms. Leach's personal touch and can-do attitude that have made her a success in a career field so far from the clerical position she held in an Edwards orderly room years ago.

"I came out to the base for the first time in 1983 with my boyfriend, now my

husband, who worked here in propulsion," Ms. Leach said. "As soon as I saw this place I knew I wanted to be a part of it."

On the team

Ms. Leach, a California native, joined Team Edwards the next year, working in administration at the altitude chamber before working in a unit orderly room as a way of getting her foot in the door. When she heard about an upward mobility program offering people an avenue to cross over to a maintenance-related job, she jumped at the chance.

After taking mechanical aptitude tests and appraisals, she left the office behind to explore the world of hydraulics.

"When I heard about the program it really struck my fancy," she said. "I'm not really the office type, so I took a chance, went into hydraulics and stayed there for 14 years."

Mr. Vince Miniell, Ms. Leach's supervisor in the hydraulics field, appreciated her bringing her talents to his shop.

"Ms. Stacey Leach is definitely a perfect example of how hard work and dedication pays off," he said. "She dedicated herself to a demanding training program and quickly advanced to a full journeyman position. She is the best of the best."

In 1998, Ms. Leach found out she'd be moving to Shadow Flight and has been working there since.

"She is a person of the highest integrity and dedication," said Mr. Joe Everett, Ms. Leach's second-level supervisor. "I mean it from the bottom of my heart. Stacey's exceptionally easy to get along with and always willing to help. She's a role model for all crewchiefs."

New initiatives

Ms. Polly Sweet, AFMC's Human Resources Division chief, suggests it's likely the command will soon see an increase in retraining initiatives across the Air Force. This comes as officials investigate a wide variety of approaches to filling the mounting vacancies expected in the near future, as retirement eligible employees choose to depart and pursue other interests.

"It's great to see our employees being



Ms. Stacey Leach, 412th Test Squadron, cleans the canopy of a T-38 Talon from the U.S. Air Force Test Pilot School. Now a crewchief, Ms. Leach began her career as a secretary 17 years ago.

offered opportunities to progress in occupations that are very different from the jobs they were originally hired to do."

Ms. Sweet said, "It's particularly beneficial if centers retrain employees into positions where shortages exist, such as the information technology arena."

A golden opportunity

Ms. Leach said she is grateful for the chances she's been given.

"I work in a job I love, work side-by-side with friends and have the support of my husband and two fantastic daughters," she said.

I think upward mobility is a terrific program. I went from a job with limited opportunities to a job where I get to play with jets and get my hands dirty. I couldn't ask for anything more."

—Mr. Ray Johnson AFFTC Public Affairs

Brooks woodcarver "shapes" his world

Growing up poor in rural Georgia, Mr. Phil Cason relied on his wit and knack for whittling to produce wooden toys for himself and kin. Today, Mr. Cason's gift for animating pieces of wood fulfills a passion for creating works of art.

This introspective 58-year-old woodcarver shows beaver-like determination when figuring out what to do with a piece of wood. Using finely honed tools that he made, Mr. Cason sometimes carves objects during lunch at the 311th Human Systems Program Office where he works as an equipment specialist for life support avionics.

"For the last 12 years I've been serious about carving. When I was growing up if we wanted toys, we had to make them," he said. All he had then was a pocketknife, a budding imagination and a self-reliant nature.

Inspired to carve

His childhood interest in carving waned when he joined the Air Force in 1961. In 1988 a family visit to Virginia inspired this retired master sergeant to resume carving.

Since then, Mr. Cason has created a growing wooden menagerie of about 100 pieces featuring armadillos, roosters and mountain lions. Characteristic of a true artist, Mr. Cason relies on inspiration to tackle a new challenge. "I carve what I want when I'm ready. I carve for me," he admits. Few of his works are sold. Some are given away as gifts. Most adorn his home.

While Mr. Cason recently learned the technique of 'power carving' using power tools, he considers himself a traditional woodcarver who manually manipulates wood with specially designed, razor-sharp carving knives.

Mr. Cason's main technique employs various tools to first remove wood in layers from a block to initially expose a two-dimensional figure. "I actually sculpt it by hand shaping it with sandpaper." He says faces are the hardest things to carve, explaining, "One slip of the knife or too deep a cut and the whole expression changes."

His favorite subjects are animals because they provide the most detail for capturing realistic images. "I've carved most big game animal in the United States, except the antelope."

Putting the pieces together

Some woodcarvers work at a large scale from a single block of wood, however Mr. Cason often shapes his creations from several pieces of wood. No detail is too small. An example is a miniature carousel horse he carved based on an original 1919 Herschel design. "The horse's head, tail and body are made from three pieces of wood. I carved each piece separately, then used wooden pegs to connect them together."

Always casting a wary eye for proportion, Mr. Cason is not satisfied until he modifies his creations to get the right shape. "For models, I use photos and reference book illustrations," he said. Some pieces take years of planning and as much as 100 hours to make. Quality creations in wood are the result of extensive research he and fellow members of the Alamo Woodcarvers Club use to guide them. Club participation has helped Mr. Cason



Mr. Phil Cason carves during his lunch break at the 311th Human Systems Program Office, Brooks Air Force Base, Texas. His new creation, a mule, is slowly developing under his knife.

develop his skills. "I've learned how to pay attention to detail." He progressed in this genre while supporting the club's project to build a fully operational miniature carousel to be auctioned to raise money for Boysville, San Antonio, Texas.

The best woods

Also important to woodcarvers are the types of wood used. "The main wood I use is basswood because it holds detail better than most hardwoods," he said. Nonetheless, Mr. Cason has experimented with a variety of woods ranging from swamp wood to the difficult-to-carve cherry wood.

He has never attempted creating full-scale figures. However, his largest piece to date is an 18-inch-high, six-pound Indian bust based on Chief Black Kettle.

Mr. Cason subscribes to the woodcarvers' mantra: "it's quality, not size that counts." He says it takes about 10 years to become proficient in carving birds of prey. Mr. Cason is particularly pleased with his red tail hawk that will be his entry in the Texas Woodcarvers Guild's Fall 2001 roundup competition.

He doesn't consider himself a master carver, but an "advanced carver." More importantly, he considers himself fortunate to have the talent to create the art he enjoys. He constantly probes his mind for inspiration. He asks, "How can I give it life so it won't look stiff?" Beauty certainly is in the eye of the beholder a poet once wrote, but for Mr. Cason the technique that truly gives wooden figures life is the spirit conveyed through their eyes.

—Mr. Rudy Purificato, 311th HSW



Lt. Col. Vincent Michaud, 96th Aerospace Squadron commander, inspects a vial of flu vaccine. (Photo by Ms. Lois Walsh, AAC Public Affairs)

Commander wins military medicine award

EGLIN AIR FORCE BASE, Fla. — The 96th Aerospace Medicine Squadron commander here recently received the Chairman of the Joint Chiefs of Staff Air Force award for Excellence in Military Medicine. Lt. Col. Vincent Michaud received the award for demonstrating leadership and caring for military personnel.

The aerospace medicine squadron staff manages an extensive preventive medicine program for the base population. Col. Michaud and his team are credited with using a military immunization tracking system that saves more than \$50,000 and 3,000 man-hours annually.

They are also responsible for medical readiness, including reaching a 99 percent anthrax immunization compliance rate and the installation fitness program that achieved a 100 percent test rate.

Although meeting the logistical challenge of touching more than 7,000 military personnel brings accolades for Col. Michaud, he's quick to acknowledge that success is not his alone.

"I'm a firm believer that individual awards are nice but they are more an acknowledgement of team success," he said. "There's nothing I do that isn't a part of a team, whether it's a few people or my squadron. I cannot think of a single thing I have done by myself."

— AAC Public Affairs

Eglin wins international erosion control award

EGLIN AIR FORCE BASE, Fla. — Being a world-class test and training facility isn't enough for Eglin's members. Now, they can add being world-class erosion control specialists to their repertoire.

The Air Armament Center Environmental Management Directorate here is one of four organizations recently honored with the 2001 Environmental Achievement Award from the International Erosion Control Association, an international, non-profit organization.

This environmental achievement award is the association's highest recognition, given for an outstanding project or program that demonstrates excellence in natural resource conservation by applying effective erosion and sediment control policies, practices and public education.

The award was given to Eglin's members for their work in habitat improvement for the federally endangered Okaloosa darter through a stream sedimentation control program. Nearly 90 percent of Okaloosa darters exist only in Eglin streams and erosion can degrade or destroy the darter habitat when runoff carries sediments into adjacent streams.

"By reducing erosion into Eglin's streams and enhancing endangered species habitat, Eglin's mission gains flexibility from the regulators," said Col. Mike Newberry, AAC environmental management director.

Through partnerships, Eglin has worked to protect the Okaloosa darter by reducing erosion. The AAC Natural Resources branch, also known as Jackson Guard, identified erosion sites of more than 500 acres that were impacting darter habitat and needed rehabilitation.

To design and contract conservation measures on the streams, they partnered with the U.S. Department of Agriculture and others.

Working as one team, the partnership used innovative methods to reduce more than 52,000 tons per acre of soil loss in erosion sites impacting darter streams, which resulted in almost 80 percent reduction in sediments carried into those streams.

One innovative change has been using native vegetation to stop erosion from bare watersheds. Using native plants and grasses mimics the ecological diversity of

the surrounding plant community and is more durable than non-native plants.

Through these and other erosion control practices, stream quality has improved and the Okaloosa darter population has steadily increased during the last few years. This increase has been so significant that the darter may soon be able to down list the species from "endangered" to "threatened."

"The quality of the erosion control program can be largely attributed to the dedication of Mr. Michael Camizzi and Mr. William Pizzolato," said Mr. Steve Seiber, chief of Jackson Guard's forestry branch. "They're a strong team and their work stems from a heart-felt desire to improve the habitat for the Okaloosa darter and restore Eglin's stream and wetlands to a high quality condition," he said. "That has been the key to their success."

— AAC Public Affairs

Hanscom CE's future plans earn them AF awards

HANSCOM AIR FORCE BASE, Mass. — Hanscom's 66th Civil Engineer Squadron recently took the Air Force by storm, walking away with three Air Force-level awards.

Lt. Col. Thomas Schluckebier, 66th CES commander, took top honors in the Air Force's Outstanding Civil Engineer Manager of the Year in the senior military manager category.

The squadron's housing flight also won runner-up for the Brig. Gen. Michael A. McAuliffe Award for best housing flight and Chief Master Sgt. Thomas Martone, operations superintendent, won runner-up for the Maj. Gen. Joseph A. Ahearn Enlisted Leadership Award.

Col. Schluckebier said he felt proud of his squadron and the individuals who won these very competitive awards. "We have outstanding, innovative people in this squadron, we work hard, and frankly, we expect to win," he said. "The people here did all the work and I was fortunate enough to get some of the credit."

"We'd also like to thank all the base organizations we rely on, from the contracting squadron to the logistics squadron, we couldn't do our jobs without a great team effort from everyone," he said.

According to Col. Schluckebier, one of the projects the civil engineers got recog-

nized for is their plan for building a co-generation plant that would produce electric energy and steam. When finished, the plant will provide heat and power to buildings more efficiently and at less cost.

"Hanscom is the only base in the Air Force working on this type of project under the auspices of a deputy under secretary of defense installations initiative," Col. Schluckebier said.

Another recognized accomplishment is the squadron's plans to move 1,000 people from the MITRE campus, a site off base, to Hanscom, involving more than \$36 million in major construction.

As a quality-of-life initiative, the squadron is working on making improvements in base housing.

"We recognize that the housing situation in the Boston area makes living on base economically preferable for a majority of our military families," said Col. Schluckebier. "We're looking at several ways to improve the housing situation."

— *ESC Public Affairs*

Robins team nominated for DOD level award

ROBINS AIR FORCE BASE, Ga. — F-16s of the Air National Guard and Air

Force Reserve Command are patrolling the skies over Iraq equipped with the latest precision attack system thanks to the LITENING II targeting pod program team managed by the avionics management directorate at Warner Robins Air Logistics Center.

Their outstanding teamwork, accomplishing the job in minimum time and at the lowest cost, recently earned them the Air Force Materiel Command's nomination for the Department of Defense-level David Packard Excellence in Acquisition Award.

Mr. Russell Bone, director of the precision attack system program office, avionics directorate, said "LITENING II enables pilots to locate targets and drop laser-guided bombs with pinpoint accuracy. The pod contains an infrared television camera and laser that lights up the target for precision guided bombs to follow. It makes a dot on the target and the bomb is guided to the illumination."

In 1998 Northrop Grumman and Rafael Co., of Israel won the contract to produce 96 LITENING II targeting pods so the reserve and guard could participate in contingency operations.

The LITENING II targeting pod replaces the low altitude navigation and

target infrared for night, or LANTIRN, which saw service in Operation Desert Storm 10 years ago. Procurement for LANTIRN ended in 1995, he said.

According to the nomination package, the LITENING II team brought the system from flight test to combat deployment with 100 percent availability in only 45 days. "It was outstanding the way the team came together to do this in such a short time," Mr. Bone said.

The team ensured that pods, spares, training and support equipment were provided to four reserve and three guard units in support of Operation Northern Watch, which enforces the no-fly zone over Iraq, even though the program was contracted to support only one of the three guard units.

Mr. Bone credited program manager Maj. William Hack of Wright-Patterson AFB, Ohio, and a "total team effort" between team members at Wright-Patterson, the Precision Attack Special Program office at Robins, the reserve, and guard units and the manufacturers. The Office of the Secretary of Defense for Acquisition and Technology is expected to announce the Packard Award winner in May.

— *WR-ALC Public Affairs*

Civil engineer manager wins Maj. Gen. Lupia award

EGLIN AIR FORCE BASE, Fla. — A 96th Civil Engineer Squadron member has earned the Air Force's 2000 Maj. Gen. Eugene A. Lupia Award. Capt. Frank Miyagawa received the award that recognizes a CE military manager's superior job performance each year.

In June 1999, the Eglin's civil engineer group was awarded a contract as the most efficient organization after a commercial outsourcing study. Under the contract a new requirements flight formed as part of the reengineering process.

Capt. Miyagawa's involvement in standing up the new flight is just one tasking that contributed to his selection.

Capt. Miyagawa said during the reengineering process, customer surveys indicated that not knowing the status of work orders was a major complaint. The requirements flight is creating a central customer service hub that will simplify that process.

During the award's timeframe, Capt. Miyagawa deployed to Turkey to support Operation Northern Watch. While there, he developed a \$10,000 requirements plan for a new operations facility and was the single focal point for all Northern Watch engineering requirements.

"The biggest challenge I have is operating at 60 percent manning," Capt. Miyagawa said. "There's a learning curve to stand up the flight and continue day-to-day operations. I have to be forward thinking on the reengineering to make it happen and not just juggle both but to keep all the balls in the air at one time and not let too many of them fall."

Capt. Miyagawa also credits the group's visibility as a plus in his selection. "Twice the group was Air Force Materiel Command's large CE Group of the Year and two times a finalist for the Curtain Award, which is the top three CE groups in the Air Force."



Capt. Frank Miyagawa, 96th Civil Engineer Squadron, reviews plans in his office. (Photo by Ms. Lois Walsh, AAC Public Affairs.

"My biggest goal before leaving this summer is to make sure the reengineering is on track," he said. "We're in the final stages now to do what we said we were going to do-the hard part is to make it all happen to reach the goals."

— *AAC Public Affairs*

